

THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. LXII.

SATURDAY, JUNE 17, 1893.

No. 24.

ORIGINAL ADDRESS.

MEDICAL JOURNALISM.¹

BY MR. ERNEST HART,

EDITOR OF THE "BRITISH MEDICAL JOURNAL," ETC.

I LEFT England at a moment of great pressure of public business in order to have the pleasure of fulfilling this engagement. So great, indeed, was the pressure that a few days before starting I telegraphed Dr. Culbertson that, to my great sorrow, I feared that it would be impossible for me to leave uncompleted Parliamentary work which I had in hand, as Chairman of the Parliamentary Committee of the British Medical Association on behalf of the Army Medical Department and of the Medical Officers of Scotland. However, it is not only faith that will remove mountains, but the heart's desire is almost as potent. I have come because you wished me to come, and because I wanted to meet you; I came to exchange that hand-shake which is a simple and moving expression of friendship between English-speaking men of the old country and the new.

Now that I am here, I feel how little it is, beyond the expression of good-will, friendship, and esteem, which I have to say. But presence is more than words, and, under such circumstances, is in itself a message—one of which I ask you to accept the dumb eloquence and to make that the apology for imperfections of my desultory and hesitating words, for Englishmen are dumb dogs, and I am no orator, as every born American is. In vain extenuation of our verbal deficiencies, we try to remember the injunction, *facta non verba*, and I would again ask you to accept the fact of my presence as an excuse for the pooriness of my words.

Speaking as a journalist to journalists, I have chosen as my theme "Medical Journalism." I have had now some thirty years' experience of it, and it is of the lessons learned and to be learned that I shall endeavor to take counsel with you.

JOURNALISM AS A CAREER.

During those thirty years a great change has come over the world of literature, science, and politics. In that change, which journalists have largely helped to bring about, their functions, their power, and their duties have been largely transformed and inevitably magnified. The mission of the medical journalist is a great one; it is no longer an accidental function of an otherwise busy man's life. Even the ablest men who have taken that view of journalism have failed to make much mark in that calling. I refer to men of such capacity and standing as Jenner, Quain, Spencer Wells, Barnes, and Jona-

than Hutchinson—all of our later time. It offers a career that repays and requires undivided devotion; one that may fulfil high ambitions and subserve large usefulness. I speak of it as a mission; for no man can reach the ideal of medical journalism who only writes to live; he must live to write.

THE IDEAL QUALITIES OF THE JOURNALIST.

The ideal journalist needs to cultivate many qualities which it is not always easy to combine. He should have rapidity of initiative and promptness of decision, for slow deliberation is the grave of opportunity. He needs quick and catholic sympathy; for this is a great source of power; but a corresponding capacity for just indignation is its necessary correlative and qualification. Magnanimity is a necessary editorial quality, for often the best way to remedy injuries is to forget them. An editor must know what to pass over as well as what to note, and must be able and willing, often graciously and tenderly, to ignore what others know. He must be accessible to all; and while appreciating the personal acquaintance and justifying the confidence of the leaders among whom he lives and ranks, he needs to be in daily touch and constant sympathy with the professional masses, whose requirements and rights it is his especial function to voice and to champion.

GUIDING PRINCIPLES.

To be really useful and to be really powerful, two things which are almost synonymous, the editor of a medical paper must, in his public capacity, even more than other men in their special spheres, always govern his course and be prepared to justify it, by referring each individual case to a recognized basis, and a logically defensible principle. He is a leader militant; he must be a standard-bearer, and must have always a motto inscribed upon his flag. I long since chose mine. It is one to which many thousands of our profession in Great Britain have rallied, and I do not see any prospect of needing to change it for many years to come; my guiding principle has been and is "The government of the profession by the profession for the profession." You will recognize in this formula the altered words of one of your greatest statesmen. Of the medical press, even more than of the general press, may be used the words of one of the ablest of modern editors, that it should be at once the eye, the ear, and the voice of its readers, and especially of the lowly among them. It should be the visible speech—the phonograph of all ranks. It confers a chieftaincy which arises out of its being the servant of all. Among its great powers must be counted that not only has it the casting vote in many decisions—great and small—but it has also both initiative and power of closure. It can declare urgency, or shut down discussions. It is a Parliament always open, and of which the editor is not only chief orator, but he is also speaker and chairman of committee.

¹ An address delivered before the American Medical Editors' Association, at its meeting in Milwaukee, June 5, 1893. Special stenographic report kindly revised by Mr. Hart for THE MEDICAL NEWS.

POWERS, PRIVILEGES, AND PAINS.

With its privileges and responsibilities come many pains. Journalism entails much sacrifice.

An editor needs, and must have, many enemies; he cannot do without them. Woe be unto the journalist of whom all men say good things. A man, says Oliver Wendell Holmes, whose opinions are never attacked is beneath contempt. For every real thought on every real subject knocks the wind out of somebody. *Compesce mentem; durum sed lævius fit patientia quicquid corrigere est nefas*; which, freely translated, may be summed up in a few words: "Bide your time, keep a cool head and quiet mind. Time cures all things, and patience softens hardships. Editorial work, like all other good work, is largely one of self-sacrifice. It is the grave of literary reputations and the despair of literary ambition. In writing leading articles, as Washington Irving found in voluminous correspondence, "your mind is torn from you in strips and ribbons," which are scattered to the wind, and your thoughts leak out in dribbles which barely moisten the earth. Where is there a literary memorial of any, even the greatest among editors? Perhaps Addison might have survived by his *Spectator* alone, but he was an essayist rather than a journalist. St. Beuve has left a monument of literary criticism, but not, it is to be feared, "more lasting than brass"; but Delane, wise and great editor as he was, the brilliant Fonblanque, Hutton, philosopher and moralist, have but written, I fear, their names in sand, and that is the common lot of all journalists as such. In their works they shall live, but their names, hardly known even in their own day, shall speedily be forgotten. That is at once their glory and the penalty in which they must rejoice. Their influence, far-spreading and enduring, their unseen power in the shaping of events, is the reward of their self-effacement.

An editor must quickly form opinions, and firmly express them, but he does well not to enter into controversy. "For controversy," it has been well said by Dr. Oliver Wendell Holmes, "equalizes fools and wise men in the same way—and the fools know it." It is a prudent thing to refuse to be drawn into controversy, especially in the pages of one's own journal. Don't lose time in altercation, for in much altercation truth is lost. Let every man have his say, let him contradict you, let him attack, provided he does so in the limits of courtesy and of good temper. Learn from him, and let others learn. Do not answer him or put tags to his letter, unless some rectification of facts is necessary. Among the earliest lessons for an editor to learn, and it is one also which must last him during all his life, is to be slow to think evil, and to be hard of hearing for personal accusation. The accused so often turns out to be whiter than the accuser.

REVIEWS AND REVIEWERS.

If now we may, in passing, linger for a moment in the field of technical details to speak of some special editorial difficulties, I will select as not the least trying that of the fair and kindly conduct of the department of reviewing. It is an obvious truism, often clothed in the millinery of epigram, that the author who sends a book for the candid opinion of the reviewer, as he says and believes, almost invariably expects it to be praised.

Anything cooler than a warm shower of eulogy chills him; a lukewarm mixture of praise and blame makes him shiver; a rain of cold criticism is apt to make his teeth chatter—with rage; and for this there is great excuse. Of a book, even more than a child, the author is apt to say to himself: "It is a poor thing, but mine own." The condemnation outrages not only a man's self-esteem but his parental affection. It is well, then, to advise the younger reviewers, who are apt to be arrogant and satirical on small provocation, to temper justice with kindness; to seek out merits as well as defects; to endeavor to portray the character of a book when passing judgment, and to forego the savage joy of cutting up the product of the feebly well-intentioned. Rather pass their work over in silence. But there is a tribe of books, wares of the self-advertiser and the vulgar notoriety-hunter, flags of the unscrupulous privateer who flies, without a warrant, the colors of the specialist; signboards of the masquerading quack. Of these it must still be said: "When the culprit escapes, the judge is condemned." But it is of literary quackery in high places, of the empty platitudes, of the ill-written inanities, of orations, discourses, and lectures by men who, having attained professional distinction, fail to set aside time for continuous intellectual culture—it is of these that it becomes the medical journalist to harden his heart to the unforgiving judge. He alone can venture fearlessly to do so, and he ought to do so, for they not only disappoint but they mislead. They lower the literary standard of medicine, which is already inadequate.

LITERARY STYLE.

That brings us to the subject of literary style in medical journalism, which may be dismissed, however, in very few words. An editor is often asked by young writers: "What style would you recommend me to adopt? and what advice can you give me for writing in your journal?" I don't know what your view may be, but it has always seemed to me desirable to recommend the avoidance of style, and to advise those who seek counsel on style, consciously to avoid it and to try chiefly to say what they have to say as clearly as possible, and to seek mainly the accurate expression of precisely the shade of meaning which it is intended to depict. It is a golden rule to think out clearly and precisely what there is to say, and to say it shortly and without ambiguity. People who are anxious about style are generally those who have little or nothing to say, and they are precisely those who take longest in saying it. It is generally difficult to say nothing without saying it at great length, and medical stylists are among the bores of the profession and the terrors of the medical journalist. On the other hand, nothing will compensate for the want of clear and grammatic expression; nor is there any department of journalism in which pompous rhetoric and the straining after jocosity is less graceful than in medical journalism.

ORGANIZATION OF THE MEDICAL JOURNAL.

I have nothing to tell you which you probably do not know better and from more modern sources, and from your own experience on this subject; but I can, in a few words, lay bare to you one or two secrets of our press-room, and leave you to value or to cast them away.

Many of us here were educated in the old school of journalism, which relied chiefly on the permanent staff of leading article-writers and reviewers, to whom were allotted, from week to week, everything in their respective departments. When a very young man, and while still residing in hospital, I wrote the editorial "Notes of the Week" for a leading journal. Three columns a week was the allotted tale. To another member of the staff was intrusted three columns of "Answers to Correspondents," and so on from cover to cover. In some high places I believe that system still survives; it seems to me effete. At any rate, I have abolished it for the last twenty years. The only system that seems to me adequate to the real needs of professional readers is that in which every unsigned editorial paragraph is written by a specially selected expert. That is the principle on which I have modelled the journal I have the honor to conduct. Every letter received, every paragraph, every cutting editorially dealt with, is referred to an expert having special knowledge and being a recognized authority in the matter. The recent examination of our books shows that to fulfil the requirements of the comparatively few pages of our journal devoted to unsigned editorial matter, we need and employ the services of an effective staff of nearly two hundred and fifty editorial writers. Of these upward of forty contribute on an average to our pages every week—often only a few lines each; for our object is authoritative accuracy; our literary aim is brevity and fulness; and our difficulty is condensation. It is a laborious and difficult method, involving heavy daily correspondence and constant vigilance to guard against personal eccentricity or prejudice or—that bugbear of journalism—unjustifiable censure. But that method may, I venture to think, be recommended as one that gives authoritative accuracy, reality, and trustworthiness to journalism. A medical journal, in order to rise to the height of extended usefulness, needs to be written from end to end by experts; and so far as the *Journal of the British Medical Association* may be considered to have been a success, that success has, I believe, largely been due to the fact that no pains or necessary outlay has been spared to provide that every line in every department shall be written by persons who are themselves trustworthy experts; that it shall be free from padding, and in its smallest details real and true; worthy of confidence in statement of fact, and free from the rehash of second-rate opinions gathered from second-rate sources.

I may venture also to suggest that it is a great advantage to a journal and to the profession which it represents that it should be connected with living organizations, local or general. Energy becomes in itself a merit when otherwise it would be a fault; when there is an organization that underlies and is capable of overruling it; when the journal is not only a voice—*vox et preterea nihil*—but also an undisguised personality and associated with influential standing committees. A journal becomes thus an active, permanent, and ever-living power in the State, and it is from the combination of a journal with an association that the highest development of this form of professional and social influence, I believe, may be fairly demanded and expected. And our experience has shown that it is not always expected in vain.

MEDICAL ETIQUET.

A class of questions which give an editor frequent occupation for thought, and sometimes some passing trouble, are those known as questions of medical etiquette. The value, the uses, and the meaning of medical etiquet are very variously estimated. There are those to whom it is *fetich*, and those to whom it is *tabu*; to some it is a name of terror, to others a term of derision; some assume to hold themselves above its reach, others are obviously below it, and some outside of it; but consciously or unconsciously all are affected by it. The philosophers hold it to be unnecessary because superfluous; but it is perhaps true, however paradoxical, to say that in our complex modernity of civilization it is often, and sometimes chiefly, the superfluous that is felt to be essential. At any rate, it is chiefly our superfluities that become indispensable. The philosophers are apt to predict that medical ethics have no separate existence, apart from or antagonistic to the rules of general ethics. Far from being a reproach or a ground of detraction or a reason for abolition, that is one of its highest claims to respect, and a fair measure of its usefulness. Medical ethics are particular cases of general ethics. They constitute the bulwarks and the outer fortification of the central fortress. Do unto others as you would have them do unto you, is the golden rule which is enclosed within the casket of general as of medical ethics. But society has found it necessary to formulate a vast number of accepted laws of conduct which are none the less necessary for daily use because they may all be found inscribed in the Ten Commandments. The two hundred and forty Levitic commandments, the Gospel rules of conduct for life, and the whole code of modern legislation for the regulation of social relations, are not superfluous, because they may be traced to the simple Mosaic tablets, and to the Sermon on the Mount. In the complex relations of medical life questions daily arise involving principles upon which every man might, after due thought, decide for himself. They include applications of principle which every man might work out if his intellect were always keen, his judgment well balanced, his interests calmly self-judged and easily put aside when they conflict with the general interest. So perfect a being might be content to be a law unto himself; but for others less perfect it has been found in every walk of life that it is well to have at hand, stored in the memory or laid down for reference, decisions and rules already settled by the wisdom, the experience, and the judgment of the wisest and best of our predecessors and our contemporaries—that is, the code of medical ethics, and wise men will not despise it. Let me say in one brief sentence that many of us in Great Britain think it one of the highest and greatest claims to sympathy and respect of the American Medical Association, as a representative body, that it has framed and promulgated such a code and that it has made great sacrifices to uphold it. *Securus judicat orbis terrarum*.

There is one question that has from time to time cropped up in relation to medical etiquet, and that has long since been thoroughly settled with us, but as to which there is, I hear, still some difference of opinion among various sections of the profession here. It may be worth while to refer to it in passing, as an illustration

of the view that I have just expressed, as to the convenience of having the particular cases of medical ethics that involve some complications, carefully thought out and authoritatively settled. I am thinking, in saying this, of the question of

CONSULTATIONS WITH HOMEOPATHS.

Some ingenuity has been exerted in endeavoring to show or to suggest that the rule that prevails everywhere, and unquestioned throughout Great Britain, forbidding such consultations, is a selfish rule and contrary to the public welfare. If it were so, it would be self-condemned, for we are probably all of us here well agreed that the fundamental principle of medical ethics is that all rules laid down as part of the code are, and must be, as much for the welfare of the whole community as for the good guidance and advantage of the medical profession as a class.

The arguments that are sometimes used to indicate that the refusal of a practitioner of good standing to consult professionally with a homeopathic practitioner is contrary to the public good and a mark of illiberality and intolerance amongst regular practitioners, are a false, fabricated, specious, and worthless plea. On what is the demand for such a consultation based? The only correct and forcible basis is that it should be for the benefit of the patient. It is sometimes said that, at any rate, the regular practitioner can and ought to give his assistance in determining the diagnosis of the case. But the answer to that is plain as noon-day. We are not here, nor do we enter the sanctuary of the sick-room to solve conundrums. The medical mission is to heal the sick. The physician fulfils his function of the *iatrikē* only when his diagnosis is to be followed by an effective treatment. Now, we all of us have the conviction that the treatment, so called, instituted by homeopaths as such, is absolutely ineffective, and does not and cannot, if faithfully carried out in accordance with what is known as the homeopathic doctrine and method, be of any avail whatever.

Of course, it is said that very often the so-called homeopathic treatment is not carried out by homeopaths. In that case the nomenclature is itself a fraud, and we are not called upon to soil our hands by taking part in any such imposture. But we treat homeopathy and are willing to regard it as an honest delusion. The physician, however, can take no part in such delusion. If he were to accept the position of a mere solver of riddles, he would lose all that makes medicine dignified and that ennoble its functions. He would be doing worse than this in entering into a consultation with a homeopath. We are entitled to assume that the homeopathic practitioner himself believes that his treatment of infinitesimals may be of some benefit to the patient. At any rate, we may feel sure that the patient entertains that delusion, and by entering into consultation over the sick-bed, the physician would ratify by his presence that understanding. The public could not understand that fine-drawn, artificial, and unholy distinction which would allow a conscientious practitioner to stand by the bedside of a man smitten with disease, trembling, perhaps, on the threshold of death, and on the paltry pretence of assisting to clear up the diagnostic difficulties of the case, to examine the patient and leave him to the tender mercies of one who, in his heart, he believes, and who, with all his intelligence, he is convinced, is a person carrying out a

system of medicine, so called, which is absolutely incapable of affording to the patient such chances of life as the advancing inroads of disease may leave. Consultation with a homeopath, regarded from this point of view (and I know of no other from which it can fairly and worthily be regarded), is worse than a sham, worse than an imposture. It is a crime. On this head of conduct there is, I have said, no division of opinion throughout Great Britain, and any physician who should break that now well-established rule would be regarded as putting himself beyond the pale of ordinary professional intercourse with his brethren; and men would refuse, and before now have refused, to consult with any practitioner who thus misinterprets the true ethics of consultation.

No ingenuity, no special pleading can set aside, so far as I have ever been able to understand the matter, the prevailing ethical rule that underlies the decision of this particular case; and it affords, I think, a very good example of the importance of not leaving every man to draw his own conclusions and to work out his own deductions from the few central principles, but of having at hand decisions made deliberately and in general consultation on thorny points, which it requires some firmness of purpose and an immovable moral determination rightly to solve, without being misled by side issues. One or two eminent men, as I can recall in my early experience of journalism, allowed themselves to be misled by the specious cry of intolerance, and for a moment declared the intention of accepting, under the flag of liberality, the false position that I have indicated. It was but for a moment, and it would be unfair now to recall the name of the greatest among them, who quickly saw the error of his ways and drew back in time to save his great reputation and his spotless honor. I only refer to the matter thus briefly as indicating that for the wisest and greatest among us it is true that the honor and the esteem of the mass of the profession are likely to be surer guides than the acute intelligence of a few, although among these there may be those whom we delight to honor as leaders of the profession.

A strict adherence to the rules of etiquette is sometimes, with shallow scorn, stigmatized as trades-unionism. We can be well content to leave that phrase as it stands, but let us translate it into its proper language. Medicine is not a trade; it is a profession. And unions such as ours, such as yours, unions which are called the Association of Medical Journalists, or which are called the American Medical Association or the British Medical Association, typify and embody professional union. We accept and convert to our own honor and dignity and to the welfare of the public, the very phrase which is hurled at us as if it were a reproach. Yes, we here are all for medical union. Our duty as medical journalists is to promote professional union, and it is one of the great titles of the American Medical Association to honor, one of its great titles to the respect and the esteem of the profession in this country and in Great Britain, that on this matter of consultation with homeopaths it has chosen the straight and narrow path—that it has declined to be drawn off by the blandishments of those who offer a crown of liberality which looks flowery enough, but which is quickly shown, when it is handled, to be a crown of crackling thorns—one which, however decorated with the blossom of public applause, pierces the very substance of pro-

fessional honor and duty. It is the liberality of a Gallio which we are invited to accept as our ensign, but which the American Medical Association and the British Medical Association are unanimous in scornfully rejecting.

The voice of the profession has been and is in the end the surest judge of right. In all such questions of general conduct and universal rights, it is the rank and file of the profession with whom lie the duty, the power, and the privilege of decision; even in the face of opposition from those whom we delight with the title of leaders of the profession. That brings me to my final topic:

LEADERS OF THE PROFESSION.

No man attains that position nowadays without having earned it. No one should reflectively and consciously speak slightly of the leaders; least of all could I. I have enjoyed the friendship and frequent opportunities of communication with men such as Austin Flint, Van Buren, Gross, Fordyce Barker, Marion Sims, Agnew, to speak only of a few of those of your leaders whose personality was best known to us in Britain, but who have, alas! gone over to the majority. No one could have known them without recognizing the signs of nobility of mind and strength of character. So with us, it has been a liberal education to have spent a life in frequent communication at successive periods, and on many great and small occasions with men such as the sagacious Brodie; Sir Henry Holland, a philosopher and traveller and a pioneer by intellect; Owen, the Cuvier of Great Britain; Watson, the Nestor of the last generation of medicine, and still a classic; Ferguson, lion-hearted and woman-handed; Syme, sturdily original and uncompromising; Simpson, a pathmaker in obstetric medicine and surgery; Christison, the type of prudence and candid research; Stokes, brimful of sagacity and humor; Corrigan and Porter, masters of the great Dublin school; and our own eminent leaders, such as Jenner, Lister, Andrew Clark, Paget, Quain, Spencer Wells, Henry Thompson, Hutchinson, all men who have risen by their own individual merits, and are known by their works. They have fruit as well as leaf.

It is not, therefore, in a cynical mood or snarling temper that I say: "Except in clinical scientific research—a great and never-to-be-forgotten exception—put not your trust in leaders. *Lucus a non lucendo*. They are called leaders, but so far as modern history shows and so far as my experience of thirty-five years teaches they are mostly led.

In the great social movement of medicine; in its human progress; in the development of the newer and wider functions of medicine; its relation to public life; its organization for the prevention of diseases, for the care of the sick poor by the State; for the organization of out-relief of hospitals in such manner as to prevent abuse; in most of the great movements of our day we have for the most part found them lagging, cold, or indifferent; feeling little enthusiasm for such movements in Great Britain as those that resulted in the appointment of the sanitary commissions, and in that organization of a public health system which laid the foundation of the new science and practice of diseases. It was Rumsey, Farr, W. H. Michael, who led the way and whom I found the most active promoters of a system

that since then has furnished the model for the civilized world. They were general practitioners, without hospital appointment. The General Medical Council of Education and Registration was created at the instance of the British Medical Association, led by Hastings, its founder; Bottomly, of Croydon; Waters, of Chester. Provincial practitioners were the founders of that Council which has rendered such vast service for the cause of education, which was created and has been remodelled in the teeth of the active opposition and subsequent indifference of the leaders of medicine, ordinarily so called, who have, however, stepped into the leading places on it in virtue of their official positions.

So was it with the reformation of the workhouse hospitals and infirmaries, which are, with us, the hospitals of the State. That was, in its inception, the work of a medical journal, the *Lancet*, with which I was then editorially associated. It was carried out by Rogers, Carr, Anstie, and myself, with the aid of a vast body of lay support which we conciliated.

So has it been with the removal of the grievances of the army and navy medical officers. Until lately the whole of that great reform has been left in the hands of the Parliamentary Committee of the British Medical Association. The battle has been successfully fought by that representative body of general practitioners, and by them alone, until last year, when the Royal colleges united to secure the adoption of the recommendations of a War Office Committee, which, however, they had up to that date done little or nothing to obtain. I repeat, then: Rest not your hopes of any but purely scientific progress upon leaders, for the maintenance of growth in your organizations, and of your relations to the State and the people. When you have made up your minds, by preliminary discussion and in general session, as to what is needful, right, and wise, and when your cause is well advanced and winning all along the line, the leaders of the profession will generally follow. Don't mistake me that it is in the order of things. The leaders are always apt to resemble the conservative old world squire described by Washington Irving, who went religiously to church and sat in the front pew and joined boldly in the responses, because it seemed to be to him an excellent example to the lower orders to show that, though he was great and wealthy, he was not above being religious. The leading men are apt to join reluctantly in any new movement. The rails must be laid first and the roadway made secure, and then they are commonly willing to board the train and come along in the first car, with the flags flying and the music sounding, to receive the sympathy and the applause of the admiring crowd. This is not surprising. *Difficilis gloria custodia*. They have, for the most part, a great practice to attend to, which keeps them busy, and a great reputation to maintain, and to make a mistake might be a terrible thing. They are apt to be thinking *ex necessitate* of where they stand. Their tendency is to stand in the old ways, with which they have good reason to be satisfied. It is for us to take larger thought of where we are going.

We journalists need not be so much afraid of making a mistake from time to time. As your ambassador said not long since, at the Mansion House, London, to the great delight of his hearers: "The man who never made a mistake never made anything." We can all try to make as

few as possible, but it has been truly said, that genius consists not in never making a mistake, but in never making the same mistake twice over. We journalists need not be so much afraid of unpopularity. It is very often the case, and, as I suppose all of us have found it out in the course of our career, that it is not infrequently the forerunner of success. You cannot, if you would, avoid hatred, but you can take care that no man justly hates you. In the fulfilment of our public duties it is necessary to base opinions and policies upon a logical principle, and to hold personal interests and private prepossessions as of comparatively little account. We have all a natural love for friends and friendship, but private friendships which will not bear the strain of public differences must give way. Time will often happily repair ruptures which have given much pain, yet these are among the greatest pains and griefs of responsible journalism. But—

They are slaves who fear to speak
For the fallen and the weak;
They are slaves who will not choose
Hatred, scoffing, and abuse

Rather than in silence shrink
From the truth they needs must think;
They are slaves who dare not be
In the right with two or three.

ORIGINAL ARTICLES.

SUMMER DIARRHEA IN CHILDREN.¹

BY GEORGE S. CAHILL, A.B., M.D.,

ATTENDING PHYSICIAN, ADAMS MISSION HOME, BURLINGTON, VT.

THE most exalted function of the modern medical practitioner is becoming more and more considered the maintenance of the health of his community, and the prevention of disease, rather than the mere remedying of that already acquired. In no department is more earnest work called for in this direction than in the prevention of an, at present, overwhelming infant-mortality. Too few of us stop to realize to its full extent the meaning of this fact. We entertain a very general idea that infancy is hedged about with seemingly inevitable dangers, and have at the same time but a vague notion of the relative activity and ultimate origin of those influences that determine the fatal result. Anything like a systematic classification of these death-causes is impeded by the most embarrassing obstacles.

A certain class in the profession and among the public at large manifests what seems like the utmost indifference. They admit the fact of an excessive mortality in infancy, but, following the principles of Malthus, profess to regard it as one of the wise provisions of Nature herself against a superfluous generation. The analogy of so many children "born to die" is by no means well taken. Nature is manifestly prodigal of her growth in the germ—but she is *not* wanton of her finished work. She scatters

seeds by the million to the winds, while but a hundred take root and grow. She matures scores of Graafian follicles in the human ovary for every ovum that is brought to full development. But at this point—the point of the appearance of the individual existence—the parallel stops. Thereafter the new life, with its host of possibilities, has an economic value, and every sacrifice of it is an economic loss.

An even more serious obstacle to our accurate classification is the poverty of our vital statistics, the nomenclature and methods of tabulating death-causes being in a state of the utmost chaos. Ignorance and glaring neglect are allowed to masquerade behind such unscientific terms as inanition, marasmus, scrofula, heart-failure, and the like, and until the American Public Health Association, or some similar authority, forms a satisfactory table of mortality statistics, and secures its adoption by State and local Boards of Health, any systematic classification must at best be approximate.

The province of this paper being entirely the consideration of the nutritional diseases—by all statisticians considered to be the most important in the classes of death-causes in infant-life, most important alike in the order of their numerical frequency and in the possibilities of their prevention—let us review the members of these groups. Cholera infantum—a term made to do duty for almost every form of infantile diarrhea—is in its true character the consequence, in all probability, of a germ that finds an easy culture in the disordered alimentary tract of the infant. In the sum-total of deaths laid at the door of this complaint are often included under various statistical tables, gastro-enteritis, and its attendant symptom, diarrhea. Gastro-enteritis is a comprehensive term, covering as it does diarrhea, gastritis, enteritis, and gastro-intestinal catarrh, described and detailed by some authorities.

In the same group with these gastro-enteric diseases is included marasmus—a name covering all of the death-causes to which this term and such unscientific phrases as inanition, infantile debility, and malnutrition are ordinarily applied. It is intended to be descriptive of conditions that involve any subacute or chronic malady of infancy in which indigestion, alternating constipation and diarrhea, vomiting and non-absorption or non-assimilation of food, are the noticeable symptoms that variegate the progressively downward course of the suffering infant, which is simply ill-nourished and ill-fed, and which finally falls a victim to gastro-enteric disease and its attendant nervous sequelæ, conditions that are related to each other by their most common characteristic, a disturbance of the digestive organs and an invariable impairment of nutrition that results therefrom, and that are further related by the similarity of those errors of hygiene that underlie

¹ Awarded a prize of \$25 by the Vermont State Medical Society.

them all. As such, and so understood, marasmus finds its proper place among other nutritional diseases.

In the relation of sequelæ to this group of maladies stand the nervous diseases. As a matter of course, this is not always the case, but it is very commonly true. Meningitis may appear even in infancy as a primary disease, but its occurrence as such is rare. This and the term cerebral congestion are used somewhat doubtfully as respects their true pathology to describe those conditions of brain-exhaustion that are so commonly the final act in the tragedy of an infant's life wasted by cholera infantum or gastro-enteritis. Especially true is it that convulsions, invariably the result of some primary disease, appear usually as a late or sudden consequence of gastric or intestinal irritation. Making allowance for their occasional primary existence, or their relationship to other disorders, these nervous maladies, added in due proportion to the nutritional diseases we have grouped together, constitute the means of the causation of at least 35 per cent. of the entire fatality of infancy.

One and all of the members of these two classes should be included to a very great degree among the preventable diseases. They are truly death-causes—but causes that in their turn are the effects of a primary and ultimate, and an almost universal, neglect of the hygiene of infancy.

In the face of the prevailing ignorance, it devolves upon the medical profession to educate the public in the principles of infant-hygiene. Three factors enter prominently into the etiology of these diseases, viz.: heat, moisture, and improper food. Heat and moisture, acting upon the food, supply cause for fermentation, and rapid increase in bacterial development. The ingestion of food thus altered is in many instances followed by dyspepsia and diarrhea. A hot summer is always accompanied by a high mortality among infants, especially among those living in cities. This destruction of lives so valuable to the Commonwealth may be mitigated by the instruction of parents:

First. As to the danger of heat, and how to avoid it.

Second. How to prepare the food of the infant, so that it will do no harm.

Third. How to carry out the simpler rules of hygiene.

It is most important to combat the heat, and parents should be fully instructed how to do so. During the hot period of the day the baby should be kept in the coolest part of the house, and the clothing should be lessened in amount. Strict regard must be paid to the food-supply. Breast-fed children are by no means as liable as hand-fed children to suffer from the diseases of summer, and when

they do, are much more readily cured. But many are artificially fed. A perfect substitute for mother's milk has not yet been found. It is now very generally conceded that cow's milk, modified by the addition of certain substances, is the best substitute, approaching most nearly to the natural supply. With a little care children do very well upon a milk-diet until the hot weather. A day or two of this and the trouble begins. The milk undergoes certain changes. It rapidly absorbs atmospheric impurities. If kept in an open vessel in an ice-box, along with meat or decaying vegetables, it will quickly acquire a peculiar taste and odor. Milk is very likely to undergo fermentation, and become sour during the night. Many children are given milk that has become altered since the mother went to bed. The child is hungry and crying; the mother has no fresh supply, so that the infant receives a dangerous food. Many diarrheas start in this way that would never occur if new, unchanged milk were given.

If we hinder the fermentation, and prevent impurities getting into milk, we shall prevent much disease. To avoid contamination from surrounding air-impurities, milk should be placed at once in tightly-sealed vessels, instead of being kept in cans, as it commonly is. The bottled-milk idea is a step in the right direction. If we can hinder the fermentation of milk, so that the infant will just as surely get a sweet, clean supply by night as by day, we can prevent many cases of diarrhea. Milk should be sent to its destination as quickly as possible. When received it should be sterilized in a water-bath after some one of the modern methods, or some modification thereof. Fermentation being thus prevented, the milk should be kept in bottles tightly corked, in a cool place, until wanted.

On the morning of June 20, 1887, I witnessed at the Boston City Hospital the following experiment with a quart of milk obtained from a reliable source. Six new two-ounce bottles were very thoroughly scalded in hot water. Three of the bottles were filled with milk and placed in a water-bath. In twenty minutes they were removed, quickly corked, and when cool were placed in an ice-box. Twenty-four hours afterward one bottle was opened. The milk was found to be perfectly sweet. On the evening of the same day, thirty-three hours having elapsed, another bottle was opened. Taste and smell could discover nothing amiss. On June 24th the third bottle was opened. The milk was tested by several persons, and declared to be perfectly sweet and good, four days having elapsed. This experiment represents what we wish to do: render innocuous any harmful element contained in the milk, and keep this pure and unchanged. It demonstrates that milk may be kept wholesome for even a longer time than is necessary. The baby may

have a proper food-supply in hot weather, and the food-cause of diarrhea be obviated.

Often we might prevent the disease by a few minutes of instruction to the mother. She is directed to obtain two small soda-bottles. They are strong, and can be tightly corked. The rest of the apparatus will be found in every household. A saucepan is to be filled with water sufficient to reach to the neck of the bottle. The bottles are to be thoroughly washed, filled with milk, and placed in the saucepan, and laid on the range. A cover excludes the air. In about twenty minutes the bottles are to be tightly corked and laid in a cool place. Mothers readily understand this procedure, and carry it out successfully. The outlay of a few cents for bottles covers the cost of the apparatus. When the child is to be fed, one of the bottles is opened and the amount required poured out. The bottle is to be re-corked, and returned to a cool place. The second bottle is not to be opened until the contents of the first are exhausted. The infant's sanitary surroundings are to be carefully inquired into. Mothers should be instructed to keep their children perfectly clean. Soiled linen should be immediately removed. Children should be repeatedly bathed, and an abundance of fresh air and light afforded.

In all cases of cholera infantum or gastro-enteritis of any degree of severity, rest is the *sine qua non* of treatment, and takes the place of much unnecessary medication. When an infant is suffering from any form of gastric or intestinal disturbance, it is well to order a period of complete abstinence from food, varying in length according to the gravity of the case. This period may be wisely occupied in freeing the digestive canal of its irritating contents, which, undigested, act as foreign bodies upon the diseased mucous surface. The sooner the entire alimentary canal is freed from these irritants the better. To lock them up in the bowels by the administration of opiates is the worst possible practice. Rest—complete rest—can only be obtained for the diseased part by the emptying and cleansing of the tract and the temporary withdrawal of food. Whenever the nervous system is suffering, as it so commonly does in consequence of gastro-enteric disease, this necessity of rest is doubly emphasized.

It is in the field of these disorders of nutrition that the best and readiest hope lies of diminishing the mortality of infants. It is by the means of these diseases that so many homes are turned into places of mourning. It is these ills that offer the best chances of prevention and the largest possibilities of cure.

Dr. C. B. Penrose has been elected Professor of Gynecology in the University of Pennsylvania, to fill the vacancy occasioned by the resignation of Dr. Goodell, who has been made Honorary Professor of Gynecology.

THE SPELLING OF SOME MEDICAL WORDS.¹

BY GEORGE M. GOULD, A.M., M.D.,
OF PHILADELPHIA, PA.

1. Of all the languages of the civilized world there is none that in the most distant manner can rival the English in the ludicrous illogicality and wretched lawlessness of its orthography. In other languages there is a manifest philologic sanity that evidently seeks to hold the written (or printed) word in some sort of relationship with the spoken word. But in our language the reverse seems to be the case; the more methods in which a single sound can be spelled the better it seemed to please the fathers of the language. As Professor Lounsbury says: "There is nothing more contemptible than our present spelling, unless it be the reasons usually given for clinging to it."

2. The labor which this fact imposes upon the child's mind, and upon all minds that, so far as language-learning goes, persist in the pre-pubertic stage, is a labor that conceived in its entirety is literally appalling. The German child learns in one year, and well, what the English child learns in three, and poorly.² It is so tremendous a labor that even few educated men reach unconsciousness and ease of orthography, and for the great mass of people it is a constant source of worry or chagrin. To a vast number of people the secret consciousness of their orthographic failing keeps them from the pleasure of writing and composition, or prevents them from profitable employment. To every person that writes, the excess of labor required by our barbaric spelling is a huge waste of time and a heightener of the friction of life. With the correlated barbarism of pronunciation, it is the greatest obstacle to the spread of English as the world's great, sole tongue.

3. The foregoing facts are so incontrovertible that no one who has even cursorily looked into philology and pedagogics has any tendency to deny them. Equally certain is it that all of our great students and masters of philology are entirely agreed as to the tremendous importance of lessening the burdensome labor of education, and the friction of life, by some approach, great or little, toward the phonetic spelling of English words. As succinctly stated in his preface by the learned editor of the great *Century Dictionary*: "The language is struggling toward a more consistent and phonetic spelling, and it is proper in disputed and doubtful cases

¹ Read at the meeting of the American Medical Editors' Association in Milwaukee, June 5, 1893.

² Professor March says that "it has been computed that we throw away \$15,000,000 a year paying teachers for adding the brains of our children with bad spelling, and at least \$100,000,000 more paying printers and publishers for sprinkling our books and papers with silent letters."

to cast the influence of the dictionary in favor of this movement, both by its own usage in the body of the text, and at the head of articles by the order of forms, or the selection of the form under which the word shall be treated."

Never has more capital been invested in similar enterprises, and never has more philologic erudition been gathered to the service than in the editing and publishing of those splendid lexicographic monuments of American scholarship, the *New Webster*, the *Century*, and the *Standard* dictionaries. It is equally true that in each case the most earnest desire of the men in charge of these works has been to go to the furthest admissible limit dared in recommending the shortening and rationalizing of the spelling of English words. They have only stopped when and where they thought further advance would result in a baulking, and a refusal of the people to follow.

Words fail me to express my amazement to hear men object to all change in the customary spelling. To be sure, they are but few, and those who have never given the matter an hour's thought or study, who thus blindly cling to the fetich of custom, stolidly resisting any change whatsoever. The changes that have been made, and that have become the rule—these they willingly accept. They have grown used to spelling *music* and *public* without a final *k*, and are willing to leave off this useless second tail. (The English even now stick to the final *k* in *almanac*.) But their mental forefathers as stoutly resisted the *curtailing* process, and their similarly-minded children will finally accept the changes that progressive minds are now forcing on their fathers. The stupidest, most disgusting thing in the world, is the brute conservatism that refuses all change, good or not good, from stolid, unreasoning desire for things as they are. Better chorea, ay, better epilepsy than absolute paralysis. Conservatism is the sham coyness of linguistic old-maidism, the crinolin fig-leaf of philologic prudery, a fig-leaf, too, not the result of too much, but of too little knowledge—indeed, of an abysmal ignorance of the history of the language.

And most strange of all is such a dead-blank wall of prejudice on the part of medical men. Their science is a progressive one; their life is harassed and hurried with the crush of duties and opportunities. Every hour's experience teaches them to ignore precedent and to cut by the shortest route to the desired end. No body of men is more hampered, and in no calling is labor so much thwarted as in theirs, by popular inherited prejudices, and the old unsloUGHed snake-skins of quackery, of myth, and of mummery.

The vast majority of medical words have not grown out of the old languages, either of the ancient

living Greek or of the mediævally preserved dead Greek. When a word is desired the modern minter snaps out his Liddell and Scott, gets some words that best suit his purpose, and shakes them together in his etymologic basket until they cohere into some sort of unity, not infrequently a very ludicrous one.

The argument most relied on by the obstructionists is the etymologic one. But even this poor scarecrow cannot be set up in our medical cornfields. I do not think the etymologic argument of much force, even in the general literary language, because already the form in a large portion of our words is altogether misleading, changed, or lost, and because the vast majority of people will and can never know anything of the etymologic rootings of their language. But, far more important still is the fact that with printing came the impossibility of a coinage ever being lost, its history unrecorded, or its tiniest rootlet unpreserved.

But far and away over all is the fact that the needs and the help of the living millions of bodies and minds present and to come outweigh linguistic and philologic considerations. Language was made for man, not man for language.

Moreover, and this note well, despite all the literary coxcombs and philologic old maids of Christendom, reform is inevitable. The people, with unerring instinct, are determined to mould their language into some better conformity to their needs. Slang is riotously rampant, and slang is language in the making. Some reform in spelling is as certain to come as future men and women are certain to come, and wisdom on our part is to accept the inevitable, and to make that inevitable as sensible as we can. As another has said: "The grammarian, the purist, the pernicketty-stickler for trifles is the deadly foe of good English, rich in idioms and racy of the soil."

All this is entirely too long an overture to a very small opera. I wish to beg my brother-editors to accept, and to unite in asking the profession to accept, certain tiny, innocent little changes in a very few of the words they use. Some time ago a valued contributor objected to our editorial suggestion that the *al* at the end of many of our adjectives was a useless length of tail that it were desirable to lop off. He could give no reason except that wonderful reason that it sounded better to say *chemical*, *biological*, *parasitical*, etc., than to say *chemic*, *biologic*, and *parasitic*. All argument was useless. I asked him if we should also, in his articles, spell *scientific*, *basical*, *thermical*, *albuminoidal*, *mesoblastical*, *graphical*, *metrical*, etc., or should we leave off the already-dropped, old simian *al*.

Another valued contributor begged to be allowed to spell *hemorrhage*, *anesthetic*, *orthopedic*, and the like, in the fashion of his ancestors, *i. e.*, with the

diphthong. I asked, should we preserve the Greek diphthong in all cases, in *æther*, for example, instead of *ether*, and in hundreds of cases, where its retention would make his printed page the object of laughter, even to the etymologic sticklers. "Analogy to the dogs!"—and, of course, logic and argumentation also to the same animals.

After four years of careful investigation and great labor, the American Association for the Advancement of Science has adopted a set of rules for the spelling and pronunciation of chemic terms. Among these rules are those advocating the dropping of the final *e* in all such words as *bromid*, *iodid*, *chlorid*, and the like, and also in all such as *bromin*, *iodin*, *chlorin*, etc. Is there any reason, earthly or un-earthly, for not following the suggestion?

While on the suicidal subject of analogy, reference may be made to the spelling of program. There are people who will use the analogic argument, if it serve their purpose, but forget it when it does not serve them. They will spell *diagram*, *anagram*, etc., without the overlong tail, but they are horrified at *program*. Old Dr. Johnson, in his "Contradictionary," spelled some word-endings *our*, others simply *or*. Some of his contradictory aftercomers stick to his *honour*, *neighbour*, *favour*, and *colour*, though they would not be guilty now of *horour*, *dolour*, *emperour*, *governour*, etc. They are indignant at meeting *meter* or *center*, but if you ask them to spell *diameter*, *scepter*, *sepulcher*, etc., they are like some other bivalves, they shut up—but "are of the same opinion still."

To conclude: There is not a single argument of value against a moderate and at least a small beginning of some kind of spelling-reform of our intolerable English orthography. As regards the spelling of medical words, any argument has less weight than as regards other words. We owe it to our profession to be progressive in this respect—at least, not to be a dead-weight to the car of progress, and, at the very least, not to pull backward, like an over-obstinate horse, when the wagon (with one *g*!) is pushed on to our heels. Wherefore, brethren, will you not assent to the little advance already gained, and will you not assent to a few little timid steps further? Every argument of logic and uniformity, and every motive of good-will and interest in progress, is on this side.

Why shall we not drop the conjoined letter diphthongs in all words? Let us spell all our words drawn from the Greek *αἶμα*, with the single vowel *e* instead of *æ*. Let us say *hemorrhage*, *hemostatic*, etc., clear through the list. The same with all other *ai*'s, usually spelled *æ*, as in *orthopedic*, *pediatric*, *anesthetic*. The same with *æ*: Let us accept *edema*, *celiotomy*, *diarrhea*, *fetus*, etc.

Let us adopt, with never a wry mouth, the

"American spelling" of *honor*, *center*, *meter* (all the meters and liters!), *program*, and the rest.

Let us get a chart of the rules for spelling chemic terms adopted by the American Association for the Advancement of Science, and hang it in front of our desks, and never spell *iodid*, *sulphid*, *hydrid*, *morphin*, *chlorin*, etc., with more *e*'s than we should. It is easier to spell them without the *e*'s!

Let us be sensible rather than conservative!

THERAPEUTIC NOTES.

A Case of Sporadic Cretinism Successfully Treated by Thyroid Feeding.—THOMSON (*Edinburgh Medical Journal*, No. cdlv, p. 1022) has reported the case of a boy, eighteen years old, who presented the typical ungainly appearance of a sporadic cretin. In infancy he had been rather slow in learning to walk, and after his second year was noted to be backward in development. There was little increase in height, although the child grew broader and stouter. The mental condition also seemed defective. Treatment with a quarter of a thyroid gland, twice a week, was instituted, subsequently diminished to an eighth of a gland. In a short time the boy began to suffer from headache and pains in the abdomen, back, and feet, and from sleeplessness and restlessness at night. Hiccough, which had never before been observed, also occurred. At the same time the appearance of the boy was undergoing appreciable change. The swelling of the body grew rapidly less and the skin became softer than it was. Speech and intellection improved. In two months there was an increase of two inches in height. Improvement continued, though not quite in the same degree as at first.

The Use of Soya Beans in Diabetes Mellitus.—HALE WHITE (*The Practitioner*, No. 299, vol. 1, No. 5, p. 322) calls attention to the utility of the soya bean (obtained from a Japanese plant, the daidsu) as an article of diet in cases of diabetes mellitus. The beans may be made into bread or into biscuits. Analyses have shown that these preparations contain almost the same amount of carbohydrates as gluten bread, and of these carbohydrates but little is sugar or starch. The oil is removed from the flour into which the seeds are ground. The biscuits, which are thoroughly baked and dried in the process of making, are quite palatable, and will remain good for an indefinite time; but the bread, however carefully made, will not, as a rule, keep longer than two or three days. The flour may, however, be prepared in other ways, and the seeds may be employed in the preparation of soup. Some caution may be required in the use of the seeds, as they are said to contain a purgative oil.

For Chorea.—

R.—Syr. ferri bromid. }
Aqueæ flor. aurantii } . aa ʒij.—M.

S.—Two teaspoonfuls in water, thrice daily after meals.
The Practitioner.

THE MEDICAL NEWS.

A WEEKLY JOURNAL
OF MEDICAL SCIENCE.

COMMUNICATIONS are invited from all parts of the world. Original articles contributed exclusively to THE MEDICAL NEWS will upon publication be liberally paid for, or 250 reprints will be furnished instead of payment. When necessary to elucidate the text, illustrations will be provided without cost to the author.

Address the Editor: GEO. M. GOULD, M.D.,
1004 WALNUT STREET,
PHILADELPHIA.

Subscription Price, including Postage in North America.

PER ANNUM, IN ADVANCE \$4.00.

SINGLE COPIES 10 CENTS.

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in registered letters.

Address, LEA BROTHERS & CO.,
Nos. 706 & 708 Sansom Street,
PHILADELPHIA.

SATURDAY, JUNE 17, 1893.

SANITARY LEGISLATION IN PENNSYLVANIA.

DURING the recent session of the Legislature of Pennsylvania a number of very important bills were presented which were designed for the protection of the public health. Some of these bills have become laws, and some were defeated through the combination of private interests antagonizing the public good. The general result, however, is not disheartening, as much benefit must certainly follow the careful execution of the successful measures.

An appropriation of \$100,000, to be made to the State Board of Health, was asked to enable the Board to adequately protect the public health in unincorporated villages and townships, and to take such measures as might be deemed necessary to guard the health of the people in view of the probable invasion of cholera with the approach of warm weather. This may be regarded as a contingent fund for use in case of epidemics, and would be of immense service in enabling the sanitary officials to act in cases in their very incipency. As a compromise measure \$50,000 were appropriated for this object, which will be a guarantee that no epidemic will be neglected for the want of funds to promptly treat it at the very beginning.

The bill to enable Borough Councils to establish boards of health, which passed finally and is now a

law, will meet the pressing necessity for thorough sanitary organization and sanitary reform throughout the State, especially in the smaller towns and rural districts, which, in the absence of organization, would be without preparation for a threatened invasion of cholera and without the means of coping with the disease should it unfortunately be introduced during the coming season.

The "Hewitt Pure Food Bill," which is regarded as a very fair measure, although not as complete as it might be, is now in the hands of the Governor, awaiting his signature. This bill carries with it an appropriation of \$5000 for the use of the State Board of Health in carrying out its provisions. This is legislation in the right direction. Its practical application during the next two years will enable the executive officers of the Board of Health to report wherein amendments will be of advantage.

It is matter of much regret that the Rivers Pollution Bill was finally defeated. No measure has been presented within recent years of more importance to the public health than this one, which has for its object the prevention of the pollution of the rivers and streams in the State of Pennsylvania. There was a time when, through the sparseness of population, the amount of sewage passing into the rivers was so small, in comparison with the volume of water, that it mattered little if this mode of disposal was made use of. But now, since the population of the State has so greatly increased, amounting to nearly six million people, and the sewage discharged into the rivers has become, in many places, excessive, thus polluting the water to a dangerous extent, the question is one of serious import to the public health. The object of the bill was to prevent so unwise and dangerous a custom, and the supervision and the execution of its provisions were intrusted to the State Board of Health. It was the further intention to gradually discontinue this practice in all cases, but one of the main objects was to vest authority in the proper body to deal summarily with all cases in which the public health was seriously jeopardized by pollution of streams used for drinking-water. It was deemed to be especially important to confer this authority at the present time, in view of the apprehended invasion of Asiatic cholera, and it must be looked upon as a serious misfortune that combinations of private interests throughout the State were strong enough to thwart and ultimately defeat the purpose of so valuable a health-protective measure.

The Quarantine Bill, which has been extensively discussed, though but little understood by the people, has, after improvement upon its original form, finally become a law. If any advantage is to be derived from this measure it consists in keeping open the Lazaretto Station throughout the entire year. This, undoubtedly, by the concentration of the work at one point, will be of advantage to the service and to the business community. The appointment of assistants to the Quarantine Physician is also an advantage, as, by the employment of additional officers, the work of inspection can be performed with greater facility. Further than this no advantage can be claimed for the measure. The transfer of the supervision of quarantine from a local board to a State board is simply a change from one set of officials to another. A change from a board which, from its position and duties, is in constant touch with all the interests involved, and presumably thoroughly conversant with the needs of the service, and having an advisory superintendence over quarantine affairs, to another board constituted anew and not having these advantages, whose duties, as prescribed, are more or less perfunctory, consisting mainly in the formulation of rules and regulations and the management and responsibility of the financial and business affairs of the station, does not appear, in our judgment, to be a public gain. An error seems to have been committed in not providing an adequate appropriation for conducting the station during the next two years, which may lead to serious embarrassment on account of the inability of the State Quarantine Board to procure assistance elsewhere in the event of an unexpected demand for money or material, a position in which the local board could not well be placed on account of the resources and support of the entire Department of Public Safety and of the City Administration, which could be counted upon in an emergency.

It is a matter of regret that some efficient legislation to prevent the sale of adulterated and impure milk was not enacted. The proposition to extend to the entire State the provisions of the law of 1885, now applicable to cities of the second and third classes only, encountered the strong opposition of the dealers in milk. Although a number of competent sanitarians believed the provisions of the bill to be wise, equitable, and advantageous to the public health, others considered the principle of applying volumetric analyses as a test for the purity of

milk to be at fault, and the proposed requirements as to the volume of cream allowed to remain in skim milk to be excessively high. With this difference of professional opinion, and the apathy and general indifference of the public to sanitary legislation in general, it is not surprising that the bill failed to pass. THE NEWS trusts that members of the profession who have studied this subject will meet in conference and agree upon a proposal for legislation that will prevent the sale of contaminated, decomposed or decomposing or adulterated milk, while not branding skim milk as necessarily impure, and not attempting to establish by law a standard concerning which even experts express reasonable doubt.

Notwithstanding the failure of several of these bills to pass the Legislature, it is a matter of congratulation that sanitary legislation in the State has been advanced very considerably, and that most of the acts that have been passed are of the greatest importance and will enure to the welfare of the entire Commonwealth.

EDITORIAL COMMENTS.

The American Medical Association Meeting at Milwaukee.

—The registration was 877—a number that compares favorably with that of other years. But it is only the busy professional man that appreciates the scientific interest that can gather so many from all parts of the country, from Maine to California, from Canada to the Gulf of Mexico, for a purpose having in it so little of self-interest. The medical politician and self-seeker, whom we always have with us, will not permit us to forget that more unworthy motives have had their part and power, but it continually becomes more manifest that the political schemers grow less and less powerful, whilst those who pursue professional and scientific ideals gain ever more in honor. To the latter come power unsought and respect unexpected, while the former must adopt methods that are progressively more and more like those of the ward politician. It is, indeed, a poor sort of "healer" that tends to become a "heeler." We may perhaps hope in vain, but hope we must, that those who secretly itch for future office may not unblushingly wheedle and scheme their personal friends into committees on nomination of "officers for the coming year."

Barring a single exception, Milwaukee was an ideal place to hold the meeting in. This exception refers to proximity of the Fair at Chicago. It was expected that the Fair would serve as an extra inducement in favor of attendance at the Milwaukee meeting. It was overlooked that it might also serve as a powerful counter-attraction. It has doubtless been true that instead of "coming early and staying late," too many came late and departed early. The paper once read, the "author" left for Chicago on the first train.

Beyond this, however, for which the Milwaukeeans are certainly not to be held responsible, the visiting members of the Association cannot help feeling the sincerest gratitude for the hospitable manner in which they were treated throughout the week. No touch of commercialism—at least, no knock-down blows, marred the spontaneity of the reception, or chilled the gratitude of the received. The visiting ladies were especially charmed by the combined delicacy and liberality of the attentions shown them and the foresight that planned their pleasure.

So much in these visits depends upon hotel comforts and courtesies that a word of warm thanks is certainly due the hosts who so well and perfectly served their guests. Conventions need not fear as regards the ability and capacity of the Milwaukee hotels to furnish most excellent hotel-homes.

The visit of Mr. and Mrs. Hart, of London, was the distinguishing characteristic of the meeting. Mrs. Hart charmed those who met her, and, catching her enthusiasm, everyone who came in contact with her will be stimulated to visit the Irish village at the Fair—the result of the noble devotion and many-year zeal of this delightful Lady Bountiful. Of Mr. Hart—we are, henceforth, all his firm friends. The address to medical editors on Monday evening was such a perfect example of easy eloquence, the playful smile of wit half-concealing and half-revealing the stern visage of serious truth and veteran advice, that everyone spontaneously voted him "a splendid fellow," and the most honored of the craft.

But it was especially the passionate earnestness and unanswerable logic of the address on cholera that showed everyone wherein lay the man's power—namely, in the life-long devotion to the health of the English and of all people, the founding of theory on indubitable fact, and the unflagging energy to bring municipalities, States, nations, to that recognition of the evil, of its cause, and of everybody's duty in regard to it, which shall result in the forefending of millions of deaths and of calamities beyond calculation. How long will the American people be in coming to a clear comprehension and determination of its duty as regards municipal and national sanitation? In this matter, as in so many similar cases, it is proved beyond all question that safety consists not only or chiefly in keeping disease out of our geographic boundaries, but in that condition and vigor of individual health that will resist disease or forbid its spread within. Cleanliness is health, and health is prophylaxis.

General satisfaction was expressed at the results of the Section-work. The attendance and interest manifested in the Sections on the Practice of Medicine and on Surgery and Anatomy were especially noteworthy. The final judgment of our readers must depend on the reading of the special telegraphic reports to THE NEWS, for which, we think, a claim for especial accuracy, fullness, and promptness is not unbecomingly immodest. All the Sections were able to complete their work by Friday morning, and in the afternoon the half dozen

remaining north of Chicago visited the beautiful National Soldiers' Home, in the suburbs of the city.

As not infrequently happens, the robbed public comes by its own when the politician-bandits fall out in a division of the spoils. In the choice of Dr. Hibberd, of Indiana, as President of the Association there is cause for congratulation. A scholarly and philosophic mind, a modest and non-self-seeking character—the honor comes to him wholly unexpected and unschemed for. It is, too, a recognition of the proper respect due to general medicine, and of the danger that we shall too highly exalt the surgeon. It would be an injustice, of which, as a profession, we should be on our guard, to accept the popular estimate of the relative value to the community of the general practitioner and the surgeon.

"Will you go to San Francisco next year?"—was the general question when Dr. Parkinson's eloquence, that he, too, modestly thought so ineloquent, slowly moved the great audience from a feeling of decided disinclination to a feeling of happy, hearty enthusiasm. Most certainly we shall go, and, after twenty-three years, it is indeed genuine wisdom to accept the oft-refused invitation of the Pacific coast—an acceptance that it is now seen she had a right to claim, and, on our part, it was a duty to American medicine that the Association had no right to refuse.

Medical Journalism.—THE NEWS finds a source of congratulation in the prompt journalistic service it has been able to render in connection with the meetings of our national medical organizations. For instance, the issue of June 10th contained nearly ten pages of a telegraphic report of the proceedings of the American Medical Association, at Milwaukee. In addition, it presented the exceedingly interesting address of the President of the Association, Dr. Hunter McGuire.

THE NEWS has always considered itself a medical newspaper, and has, for many years, been particularly fortunate in obtaining the very earliest information in regard to events of interest and import in the medical world. The issues of the last few weeks contain fuller and more interesting reports of the recent important meetings in Washington, Buffalo, West Point, Detroit, and Milwaukee than, we think, can be found elsewhere. It is intended that THE NEWS shall continue to maintain its present lead in contemporary medical journalism.

Spelling Reform.—Two years ago THE NEWS advised its contributors to adopt certain slight modifications of the ancient and musty methods of spelling some medical words, the chief of which were as regards such words as *hemorrhage*, *edema*, *anesthesia*, etc. At the meeting of American Medical Editors in Milwaukee, the editor of THE NEWS plead with his editorial colleagues to adopt these and a few similar changes. We record with much pleasure that the suggestions offered were received and accepted by the large gathering of editors present. Dr. Love, of St. Louis, enthusiastically urged the members to put in practice this shortened and simplified spelling, and by a unanimous vote the body agreed to do so. The reasons underlying the "reform" and the specific changes advised are given in an article published elsewhere. It

is a beginning, but one that may be made with ease, and it is already long past the time when some sort of spelling-reform were accepted and practised by medical men.

The Business of Medical Stenography.—Among the happy adaptations of business and mechanical devices and methods by medicine is one that has lately been made, and which is destined to be of much use to medical men in the future. In all of our large cities there is coming into existence and favor a class of medical stenographers. Even if papers are abstracted directly from the original manuscripts, there yet remain the discussions—which, indeed, are often more valuable than the original contributions. But medical men have a double reason for making use of the stenographer-type-writer. It saves much valuable time of writers, of editors, and of secretaries, and it enables a writer to better systematize his thought and better shape it into literary presentableness. Our readers are much indebted to their co-workers and helpers in this branch, and we trust that physicians everywhere will give them the support they deserve. The medical stenographer must either be a medically-educated man, or he must have given patient and serious study to the strange words, and to what to the ordinary person is little more than "jargon." The work is one of those praiseworthy specializations of our highly differentiated modern life that we may avail ourselves of with excellent advantage to medicine. The time is probably coming when all manuscript desired for publication must be typewritten, and, from an editorial standpoint, we may fervently pray that that happy day may not be far off. Will not our contributors help to hasten it?

CORRESPONDENCE.

PAIN AND SHOCK.

To the Editor of THE MEDICAL NEWS.

SIR: To the layman there are few medico-lay topics, if I may coin the word, which are of more interest than the relative amount of pain felt by individuals and races. A great deal of writing, most of it sentimental, but part of it pseudo-scientific, assumes that the capacity to suffer pain exists with tolerable equality in the different ranges of life, after the nervous system is developed at all, and that in man pain has been felt equally at different historic periods, and in different races of the same period. A great deal of the discussion on the ameliorating consequences of the use of chloroform and ether has, for instance, as its assumed premise, the implied assertion that the subjects under the knife of Paré, at the battle of Pavia, were conscious of as much pain as the subjects on the operating table at Gettysburg.

It has occurred to me, perhaps wrongly, that the extent to which patients suffer from shock under surgical operations is a tolerably fair gauge of the measure of nervous disturbance created by the operation, and this in its turn is but another name for pain. I was familiar in childhood with the fact that missionary surgeons in Southeast Turkey paid little or no attention to shock in their operations, or, to be more accurate, I never heard any allusion to shock as a thing to be considered at all. Dr. Henry West, one of the most skilful and distin-

guished of the many men who have dedicated great ability to the obscure path of medical and surgical work at a missionary station (Livias, Turkey-in-Asia), I know, during a long experience, never found it necessary to pay any attention to shock in operations upon the natives. I venture to think that the following letter on the subject, which I have received from Dr. V. M. B. Thom, who has established a hospital in Mardin, Turkey, may be of interest to members of the profession in this country, as throwing light on the subject of which I have just spoken.

May I add that Dr. Thom has established the beginnings of a medical school in connection with his hospital, and that any gifts of instruments, of books, and still more of pecuniary aid, will be of the utmost service in the work of this hospital and school, one of the great difficulties of the missionary medical teacher being the extreme poverty of those whom he is endeavoring to train, which prevents them from providing themselves with even the smallest appliances. There are many instruments laid aside for better inventions that might be given a useful term of service on missionary ground if they were contributed for this purpose.

Dr. Thom, after alluding to a question of mine on the subject, says:

"I had forgotten that shock was such a formidable enemy to operations in America. In all my operations in Turkey I do not recall an instance where I had any unfavorable results from shock, and I have had patients on the table for two hours or more, submitting to very trying operations, having all ages, from the year-or-two-old child to the threescore-and-ten or more.

"This winter I removed a very extensive cancer from the breast of a woman that would have been looked upon at home as delicate—not only the loss of an extensive amount of flesh, the loss of blood, and a very great strain upon the system in bringing the edges of the wound together, and retaining them there, and yet we had not the indication of shock. Only recently I was called to a case of labor which had been three days in pain. It was an arm presentation, with a narrow pelvis. It was impossible to deliver the child until I dismembered it, and being dead before I called, I had less compunctions in doing so. Yet the woman showed no evidence of shock. Time and again young brides, of from thirteen to fourteen years of age, will be in labor with their first child from three to five days, until they are all exhausted and worn out, but not an indication of shock. As to exercising any precautions after the operations in putting them to bed, with warm applications to keep up the circulation, or giving internal stimulants, hypodermatic or otherwise, I have never once had to do it."

Respectfully,

TALCOTT WILLIAMS.

Unusual Finding in a Dermoid Cyst.—At a recent meeting of the New York Obstetrical Society, Dr. R. L. DICKINSON (*New York Journal of Gynecology and Obstetrics*, vol. iii, No. 5, p. 421) presented quite a complete superior maxillary bone, in which the sixteen teeth were nearly all in place when removed from a dermoid cyst fixed behind the uterus, and the other contents of which had become almost entirely absorbed.

SOCIETY PROCEEDINGS.

AMERICAN MEDICAL ASSOCIATION.

*Forty-fourth Annual Meeting, held at Milwaukee, Wis.,
June 6, 7, 8, and 9, 1893.*

(Continued from page 65a.)

GENERAL SESSION.

THIRD DAY—JUNE 8TH.

MR. ERNEST HART, of London, delivered an address entitled "Cholera, an Exclusively Water-borne Disease." He said that cholera is no longer a disease beyond control. Cholera is a filth-disease, carried by dirty people to dirty places, and spread by dirty or impure water. There is nothing mysterious about the advent of cholera, and most of the incidents of its diffusion are known. Quarantine may be considered as a tribute that dirt pays to cleanliness. Cholera comes from India, and India only; although it sometimes hibernates in Europe. It has two routes: one across the Caucasus to the Baltic ports, and thence, either directly or through Hamburg, westward. The other route is from Mecca by pilgrim caravans or by boat *via* Alexandria to Europe. Last year's epidemic originated in Cashmere and was brought to Hamburg within five months. All mysterious talk of transmission of the disease by atmospheric currents belongs to a past period. It used to be said that thunder is mysterious, and it is just as reasonable to talk of cholera being mysterious. It is still a common popular notion that cholera comes by Providence and goes by drugs. This is the precise opposite of the truth. Cholera is a man-created disease, and drugs are, comparatively speaking, powerless against it. The war against cholera is the war of cleanliness against filth; and the one kind of cleanliness that is absolutely essential, and in the face of which cholera cannot spread or become epidemic, is purity of the drinking-water. No community can have the disease that does not invite it by the habitual contamination of its water-supply. Fumigation, railroad quarantines, libations, and sprinklings with antiseptic powders and fluids are vain ceremonies—mere sacrifices to the popular ignorance and prejudice. They create a false sense of security and detract attention from the only important agent of safety, namely, purification of soil, air, and water; but, above all things, purity of water. When the people insist on municipalities and corporations giving them pure water, cholera will become extinct and its terrors a mere recollection. The latest results of microscopic examination and bacteriologic research confirm the vast mass existing of statistical data, while clinically it has been shown that there has never been an outbreak of cholera in Europe that could not be traced to the distribution of an infected water-supply.

DR. HENRY H. MUDD, of St. Louis, delivered the Annual Address on Surgery. His subject was entitled "Surgical Problems." He said that surgical cleanliness has taught that drainage is not essential to the rapid healing of grave and extensive wounds. This advance has clearly defined a marked difference in the object to be obtained by primary and secondary drainage. No intelligent surgeon is ready to discard the use of sec-

ondary drainage in suppurating wounds; but there are many who assert that they do not use it in fresh, clean wounds, no matter how extensive they may be. The interest in the controversy has been narrowed down to the use or abuse of drainage in operative wounds that are clean and aseptic. It must be awarded a new place now, when perfect cleanliness is supposed to accompany every fresh wound. It was not thought that the drainage-tube can be dispensed with in all so-called clean wounds. Antiseptic surgeons assert that every operative wound can be made aseptic, and by a proper technique union by first intention can be secured. The conditions to be fulfilled to attain this end with a patient in fair general condition are an incised wound, thorough hemostasis, perfect approximation, and immobilization of wounded surfaces.

Another problem is the possibility of securing the permanent surgical relief of hernia. A permanent cure is established in many cases in children by the restraining influence of a truss. In individual cases in which permanent retention of the herniated viscus is thus possible during childhood, it should be given a full trial before resort to operative measures, as these are still uncertain in their results. The cure of hernia in adults by truss-wearing is an improbable event, and should not influence the decision against operative relief. Permanent recovery follows operative effort in from 60 to 80 per cent. of the cases. Even the lower percentage justifies continued operative effort.

The treatment of appendicitis is still an open question. The care of the individual case offers a choice of lines of treatment that make a decision most difficult. The anatomic and clinical investigations of the past few years have clearly demonstrated that the American idea of the pathology of inflammations in this region is the correct one.

Dr. C. H. Hughes, of St. Louis, was selected to read the Address on Medicine at the next meeting; Dr. Ernest Laplace, of Philadelphia, to read the Address on Surgery; Dr. George H. Rohé, of Catonsville, Md. to read the Address on State Medicine.

Dr. R. H. Plummer was selected as Chairman of the Committee of Arrangements.

The Nominating Committee also recommended, and the recommendation was adopted, that the Secretary be paid an annual salary of \$500.

The report of the Committee on President's Address was then read by Dr. Hibberd, indorsing, in the form of resolutions, all of the suggestions contained therein. On motion, the report was adopted.

On motion of Secretary Atkinson, several Canadian physicians were made members by invitation.

Dr. John B. Roberts, of Philadelphia, offered a resolution to the effect that all amendments now on the calendar be postponed until the meeting next year, to be taken up on the second day of the Association meeting in general session. Carried.

FOURTH DAY—JUNE 9TH.

DR. WALTER WYMAN, of Washington, D. C., read the Address on State Medicine. His subject was "The Extinction of Contagious Diseases." The history of the world shows that whole races of men and other animals have become extinct. Why, then, should not races of

microbes become extinct, and certain diseases that once ravaged the earth in epidemic form have so lost their inherent strength or have been so controlled in the latter part of the nineteenth century as to warrant the belief that their histories are closed, or fast closing. Thus the active period in the history of yellow fever was from 1793 to 1805. In the past the disease has been of common occurrence in Europe, the ports of Spain in particular suffering severely between 1801 and 1825, but there has been no disastrous epidemic in Europe since that of Lisbon, in 1857. The earlier history of yellow fever in the United States includes invasion not only of the South, but of posts as far north as Pennsylvania, New Jersey, New York, and even New Hampshire; but to-day, though constant vigilance against its introduction is necessary, it has practically vanished from the ports of the United States.

Since the discovery of vaccination by Jenner, in 1796, smallpox, though still a stubborn foe, no longer devastates without restraint. It is now simply a matter of choice whether or not one shall be made absolutely proof against the disease. The good effects of a compulsory law regarding vaccination are to be seen in the statistics of Prussia, in which country for six years prior to the enforcement of vaccination, the deaths from smallpox averaged 85 per 100,000 of the inhabitants, while from 1875 to 1886, after the law came into force, the yearly average was but 2 per 100,000.

Typhus fever flourishes to-day in certain parts of Mexico, and is occasionally reported from the Old World. It has always been a menace when large numbers of people were crowded together amid unsanitary surroundings; but it has no permanent lodgment in the United States. The energetic and successful measures instituted by the Board of Health of New York during the past winter to suppress this disease, although it appeared in a section of the city more densely populated than any other in the world, afford a striking example of what may be accomplished by proper laws, energetic execution, and scientific disinfection.

The history of the past few years has demonstrated most clearly the relation between cholera and filth and contaminated food and water, conditions that are likely to be overcome by the peculiar energy and love of cleanliness characteristic of the Anglo-Saxon race. In recent years the superior sanitation of England, and the more perfect quarantine surveillance of the United States, have served to protect these two nations from this exotic disease. One possible agency in the elimination of diseases of this class is protective inoculation, which though still young as a science, is not without promise. Whatever opinion may be held of Freire's inoculations for yellow fever, and Kitasato's and Haffkine's inoculations for cholera, the investigations of these and other bacteriologists in this particular field warrant the hope that results will be attained equal in efficiency to vaccination for variola.

The Permanent Secretary read an invitation from the American Pharmaceutical Association to send delegates to their meeting at Chicago, August 14, 1893.

The Permanent Secretary presented from the General Business Committee the following resolutions, which had been adopted by the Committee, and were submitted for the approval of the Association:

Resolved, That no paper shall be read by title in any Section which is not actually in the hands of the officers of the Section, and that the Secretary of the Association be instructed to communicate this action to each Section.

Resolved, That the General Business Committee hereby requests the officers of Sections to communicate to this Business Committee any general resolutions passed relating to the conduct of the Sections.

Resolved, That we recommend that the Treasurer and Committee on Arrangements adopt measures to secure by courteous circular letters as large a registration of members as possible by mail three or four weeks before each annual meeting. Also, that one month after the annual meeting each member who has not paid his annual dues be sent a notice that dues have not been paid, and that he be requested to remit the same; further, that similar notice be sent at each of the two succeeding months to those who do not remit; and that those who still fail to remit be drawn on at sight at the beginning of the next month, having been notified that they would thus be drawn on at the time specified.

Unanimously adopted.

From the Section of *Materia Medica and Pharmacy*, a resolution was offered and adopted to the effect that the American Medical Association recommend that the next edition of the *United States Pharmacopeia*, soon to be issued, be at once practically adopted by physicians in prescribing and pharmacists in compounding. It also advises the general adoption by physicians and pharmacists of the *National Formulary* issued by the American Pharmaceutical Association, and that the teaching medical and pharmaceutical colleges adopt these works as text-books.

DR. J. E. BOYLAN offered the following amendment to By-law No. 11, relating to Sections. The first clause of paragraph 5 shall be amended to read:

"It shall be the duty of every member of the Association who proposes to present a paper or report to any one of the Sections, to forward either the paper or a title indicative of its contents, and its length, to the Secretary of said Section, at least one month before the annual meeting at which the paper or report is to be read."

Adopted.

A communication from Dr. J. M. Toner, of the Committee on Jenner Centennial, reported progress, and asked permission to fill a vacancy in the committee, owing to the death of Dr. T. F. Wood, of North Carolina.

The report was received and the permission granted.

The President announced the delegates to the Eleventh International Medical Congress at Rome, and also a delegate to the American Pharmaceutical Association in the person of Dr. Frank Woodbury, of Philadelphia.

On motion, the President and Permanent Secretary were granted authority to appoint other delegates, if deemed desirable.

The President appointed as the committee to confer with the American Public Health Association, U. O. B. Wingate, of Milwaukee; Jerome Cochran, of Alabama, and J. H. Parkinson, of California.

Dr. Robert Reyburn, of Washington, D. C., offered resolutions of thanks, which were unanimously adopted.

Dr. James T. Jelks resigned from the Judicial Council, because he is already a member of the General Business Committee.

On motion, the resignation was accepted.

President McGuire, in retiring, thanked the Association for the kind treatment extended him and the Permanent Secretary and others who had aided him so efficiently. He then introduced Dr. J. F. Hibberd, of Richmond, Ind., the President-elect, who assumed the chair in a felicitous manner, asking all to go to California next year, and in every way to aid in building up the Association.

There being no further business, the Association adjourned to meet in San Francisco, Cal., on the first Tuesday in May, 1894.

SECTION ON SURGERY AND ANATOMY.

THIRD DAY—JUNE 8TH.

DR. F. C. SCHAEFFER, of Chicago, read a paper upon "Brain Surgery." He reported eight cases, which demonstrated the importance of carefully examining every case of injury and of prompt surgical intervention in all instances in which a fracture is detected, even if there be no symptoms indicating intra-cranial involvement. In one case, in a man fifty years of age, in which there was most extensive fracture of the anterior fossa of the skull and of the frontal bone, the patient walked a distance of a mile to his home. When first seen there were no symptoms whatever of any cerebral disturbance. As the wound involved the frontal sinus, it could not be determined that the injury had fractured the internal table. Although operation was advised on general principles, as the family refused, it was not pressed, and the wound was treated antiseptically.

DR. E. L. SHURLY, of Detroit, Mich., read an article entitled "Artificial Opening of Pulmonary Cavities; Insertion of Rubber Tube and Injection of Chlorin Gas." He said that, although pulmonary cavities have been opened artificially occasionally since 1847, the procedure has only recently been recognized as a justifiable one. Dr. Shurly proposes the additional injection of diluted chlorin gas into the cavities at intervals of three or four days, at least. The gas is obtained by half filling a Wolff bottle with fresh chlorin water and forcing air through this into the pulmonary cavity. Gaseous substances should be used in preference to fluids, as the former penetrate the pulmonary substance better, are not irritating, and do not produce cough. Of all gaseous bodies, Dr. Shurly prefers chlorin.

DR. J. MCFADDEN GASTON, of Atlanta, Ga., read a paper entitled "The Present Status of Thoracic Surgery." The following general inferences were held to be justifiable:

1. All penetrating wounds of the thorax may be closed hermetically by suture after allowing the discharge of fluid blood from the opening.
2. Foreign bodies lodged in the bronchi may be removed by incision of the trachea at the lowest available point.
3. Experiments for reaching the bronchi through the chest-wall afford little encouragement in undertaking operation upon the human subject.
4. Medication as a preventive and curative agency in pleuritic effusion is worthy of trial before recourse to operation.
5. Aspiration is indicated when there are large serous

accumulations, and likewise in pneumothorax, but cannot be relied upon for the relief of purulent collections.

6. Partial resection of ribs is attended with better results in some cases of empyema than the complete removal of the segments of several ribs.

7. The excision of a small portion of one rib, with the introduction of drainage-tubes, has been generally attended with good results.

8. Washing out the cavity of the chest is not requisite, except in case of contamination and decomposition of the contents.

9. The operation of thoracotomy for abscess and gangrene of the lung should be accompanied with antiseptic applications and with gauze tamponage.

10. Tumors of the mediastinum admit of interference, but further improvements are requisite.

DR. WILLIAM L. RODMAN, of Louisville, Ky., read an exhaustive paper on "Tumors of the Neck." The various cysts of the neck were considered. Of these, those connected with the thyroid gland are quite common. In the treatment of these, Kocher recommends partial excision of the gland. Total excision leads to the cachexia strumipriva. In 18 cases of total extirpation observed by Kocher, but 2 failed to develop the cachexia; while of 28 partial excisions, none exhibited any untoward after-effects.

Lymphomata are by far the most frequently observed tumors of the neck. Of malignant disease, sarcoma is more common than carcinoma. Sarcoma of the neck, unless seen early, does not seem to offer satisfactory conditions for operation. The growth is vascular, the attachments many, and the danger of recurrence great.

Tuberculosis of the glands of the neck is exceedingly common. The submaxillary glands are almost invariably the first affected. The infection spreads through the lymphatics and involves other glands. It was recommended to remove such glands in every case, as they may lead to general infection, an event that does occur in at least one case in eight.

DR. MACLEAN, of Detroit, prefers the tapping of hydroceles of the neck and injecting with iodine, as in hydrocele of the tunica vaginalis testis.

DR. MUDD, of St. Louis, agreed with Dr. Rodman in preferring excision of cysts of the neck unless there be some valid contra-indication.

DR. JOSEPH PRICE, of Philadelphia, read a paper on "The Relative Merit of the Present Methods of Treating Pyelo-nephrosis." He said that when the patient cannot stand a prolonged operation, incision and drainage should be employed. If there remains any secreting structure of the kidney, it is well to perform nephrotomy, as the possibility of a horseshoe kidney should be borne in mind. In this event, removal would result in speedy death from uremia. In the surgery of the kidney, as elsewhere, the simplest procedure that will meet the indications should be employed.

Dr. Price related that he had performed incision, irrigation, and drainage in seven cases without a death.

DR. WELLER VAN HOOK, of Chicago, presented a very valuable paper on "The Surgery of the Ureter." The fact that the ureter is sometimes injured during abdominal and pelvic operations led the author to devise a means of uniting the divided ends. One end is ligated,

a longitudinal incision made above the ligature, and, by means of two threads, the other end is invaginated into the longitudinal incision. The opposed portions are carefully united, and, if desired, covered with a flap of peritoneum to make the union more perfect.

It is recommended, when it is desired to implant the ureter in the bladder, that the ureter be first stitched in the abdominal wound, and later, the bladder stitched as high as possible in the abdomen; and when adhesions have become firm, the ureter may be implanted in the bladder, with considerable hope of entire success. This necessitates three sittings to complete the operation, but the results would seem to justify the method.

Dr. Hook objects to implantation of the ureter into the rectum. Among other objections are the occurrence of ureteritis and pyelitis.

The extra-peritoneal or retro-peritoneal method of attacking the ureter is recommended when possible. The following general considerations were presented:

The extra-pelvic portion of the ureter is most readily and safely accessible for exploration and surgical treatment by the retro-peritoneal route; hence all operations upon the ureters above the crossing of the iliac arteries should be performed extra-peritoneally, except in those cases in which the necessity for the ureteral operation arises during celiotomy. The intra-pelvic portion may be reached by incision through the ventral wall, the bladder, the rectum, the vagina in the female, or the perineum in the male. The ureter is not only exceptionally well protected from injury, but by its elasticity and toughness resists violence to a remarkable degree. The histology of the ureters furnishes most favorable conditions for the healing of wounds. Longitudinal wounds of the ureter at any point heal without difficulty, in the absence of septic processes and under the influence of ample drainage. In all injuries, when the urine has been septic before operation, or when the wound is infected during the operation, drainage must be effected posteriorly. The chemical composition and the reaction of the urine should be studied in all injuries of the ureter, the urine being rendered acid, if possible, and the specific gravity kept low. The pelvis of the ureter is, *ceteris paribus*, the most favorable site for wounds of the ureter, as scar-contraction is not likely there to be productive of ill-results. In aseptic longitudinal wounds of the ureter, occurring in the course of celiotomy, suture may be practised, as recommended by Tuffier, and the peritoneum protected by suture. Transverse wounds of the ureter involving less than one-third of the entire circumference of the duct should be treated by free extra-peritoneal drainage, and not by suture. In transverse injuries in the continuity of the ureter involving more than one-third of the circumference of the duct, stricture by subsequent scar-contraction should be anticipated by converting the transverse into a longitudinal wound and introducing longitudinal sutures. In complete transverse wounds of the ureter at the pelvis, sutures may be used if the line of union be made as great as possible. In complete transverse injuries of the ureter in continuity, union should not be attempted by suture. In complete transverse injuries of the ureter in continuity, union with subsequent scar-contraction may be obtained by lateral implantation as described. In complete transverse injuries of the ureter very close to the bladder, the duct

may be implanted, but with less advantage, into the bladder directly.

In transverse injuries of the ureter with loss of substance, the following conclusions were formulated: At the pelvis of the ureter, continuity may be restored by Küster's method of suture, provided the severed ends can be approximated. Rydygier's method of ureteroplasticity in such injuries should be tried, if sutures cannot be utilized. The primary operation should at least fix the ends of the tube as nearly together as possible. In both trans-peritoneal and retro-peritoneal operations the urethral ends can be approximated, even after the loss of about an inch of substance. The use of tubes of glass and other materials for the production of channels, to do duty in place of destroyed ureteral substance, is rarely successful, and even if temporarily successful the new duct is almost sure to be choked by scar-contraction. The implantation of the cut ends of a ureter into an isolated knuckle of bowel is objectionable: (1) because the bowel is not aseptic; (2) because the operation is dangerous. In injuries of the portion of the ureter within the pelvis, with loss of substance, the ureter should be treated as follows: If possible the continuity of the ureter should be restored by lateral implantation. If this is not possible, the ureter in vaginal operations, particularly in vaginal hysterectomy, should be sutured to the base of the bladder, with a view of a future vesical implantation or formation of a vesico-vaginal fistula with kolkleisis. In injuries to the pelvic ureter during celiotomy, when the continuity cannot be restored, and when vesical or vaginal implantation cannot be effected in the female, or vesical implantation in the male, the proximal extremity of the duct should be fastened to the skin, at the nearest point to the bladder arch. In such cases, as well as in ventral ureteral fistulae due to other causes, the bladder may be distended and sutured to the abdominal peritoneum and muscles as high as possible, and at a second operation the ureter may be implanted extra-peritoneally into the bladder. If the ureter will not reach the bladder, a flap of bladder-wall may be cut out extra-peritoneally and reflected upward to meet the ureter and form a tube. It is legitimate under such circumstances to try Rydygier's method.

Implantation of one or both ureters into the rectum is absolutely unjustifiable under all circumstances, because: *a*, the primary risk is too great; *b*, there is great liability to stenosis at the point of implantation; *c*, suppurative uretero-pyelo-nephritis is almost absolutely certain to occur. Ligation of the ureter to cause atrophy of the kidney is unjustifiable. Extirpation of a normal kidney for injury or disease of the ureter is absolutely unjustifiable, except when the ureter cannot be restored in one or other of the many ways cited.

DR. HENRY O. MARCY, of Boston, read an "Analysis of One Hundred and Twenty-five Cases of Hernia Operated on for the Purpose of Radical Cure." The paper was an addition to former communications by Dr. Marcy on the same subject. A continued experience and observation have confirmed the opinion formed many years ago that the army of truss-bearing sufferers will constantly grow less and less as cases of hernia are subjected to proper operative procedures. The mortality of radical operations for hernia in good hands is very small, and the proportion of cures is very creditable.

DR. DONALD MACLEAN, of Detroit, reported two cases of "Traumatic Aneurism of the Common Femoral Artery, with Ligature of the External Arteries." On account of the position of the aneurism, and the numerous and important branches that the femoral artery gives off, Dr. Maclean departed from the treatment generally followed and ligated the external iliac artery, with recovery in both cases.

DR. D. J. HAYES, of Milwaukee, related two cases in which he had operated for "The Establishment and Maintenance of a Urethra above the Symphysis Pubis in Chronic Prostatic Obstruction." The operation, first advised for this condition by Dr. Hunter McGuire, is to be strongly recommended on account of the ease of its performance, and the very satisfactory results. One patient was exhibited. He could retain his urine for from four to five hours, and was attending to business. Dr. McGuire has performed supra-pubic cystotomy for prostatic obstruction in over ninety cases, with but two deaths, and in both of these instances there was preëxisting pyelitis.

DR. H. C. DALTON, of St. Louis, read a contribution on "Three Cases of Traumatic Rupture of the Small Intestine, with Early Operation." One case died. In this instance operation was delayed too long. Both of the other cases recovered satisfactorily. The deduction drawn from the report was that in these cases immediate operation is necessary.

DR. HOWARD A. KELLY, of Baltimore, made some interesting remarks upon "Ureterectomy," upon which subject he has recently done so much original work. Numerous photographs were exhibited, showing the incision and various steps of the operation. The term ureterectomy is employed to indicate total or considerable extirpation of the ureter. The operation becomes necessary in cases of malignant disease and other conditions. The ureter may be reached in any one of many ways. Dr. Kelly operates with the patient lying on the side opposite that on which the operation is to be performed.

DR. LINK, of Indiana, showed specimens exhibiting the formation of bone after the periosteum has been destroyed.

DR. J. N. QUIMBY, of New Jersey, reported the case of a boy in which, a few hours after receiving a blow upon the head by a stone, convulsions supervened. After consultation it was decided to trephine. There was so little disturbance of the external table that trephining was almost abandoned, but a button of bone was removed and the internal table was found much depressed and splintered. Recovery was complete and permanent.

FOURTH DAY—JUNE 9TH.

DR. ALEXANDER DALLAS, of New York City, read a paper on "A New Treatment of Hernia." He has devised a new form of truss, consisting of a covered steel spring, which is adapted to the body over the iliac crests, the anterior arm descending almost vertically and covering the entire inguinal canal. The advantages claimed for this appliance are perfect retention with the least pressure, comfort in wearing, and stability in proper position.

For the cure of hernia, Dr. Dallas has devised an in-

strument which is passed through a small cutaneous incision over the external ring into the abdomen, and, by means of a screw, a toothed surface is protruded, the canal freshened, and the instrument withdrawn. The external opening is closed with iodoform-collodion; a truss is worn for three weeks, and then removed.

In cases of strangulated hernia it was recommended to employ hypodermatic injections of morphine and atropine about the hernia every fifteen minutes until the patient is comfortable. Operation, if finally necessary, may be performed under morphine-narcosis.

For the radical cure, a modification of Macewen's operation was advised.

DR. ERNEST T. TAPPEY, of Detroit, reported "A Case of Successful End-to-end Suturing of Intestine." When the patient, a man of forty years, with a strangulated hernia for five days, first came under observation, the sac and hernia were gangrenous. The sac had already been opened by a physician. One week after admission, when a line of demarcation had formed between healthy and unhealthy tissue, the adhesions were separated, a fresh section made, and end-to-end approximation of the bowel performed and maintained by suture of the mesentery, mucous membrane, and, finally, of the serous surface. The external wound was packed with gauze. Recovery was complete without complication.

"A New Applicator for Introducing Medicaments into the Urethra, Uterus, and Rectum" was described by DR. A. B. KIRKPATRICK, of Philadelphia. The instrument is made of aluminum, silver, or hard rubber, and consists of a cylinder about eight inches long, with an accurately adjusted piston. The desired amount of powder is taken up into the cylinder, and the oiled instrument is passed into the urethra or uterus to the proper distance, when the pencil of powder is projected by the piston.

In acute gonorrhea, Dr. Kirkpatrick has found a powder of iodoform, boric acid, morphine, and atropine, introduced by this applicator, almost a specific.

DR. JOSEPH B. BACON, of Chicago, Ill., described "A New Method of Treatment for Strictures of the Rectum." The operation consists in performing celiotomy in the Trendelenburg position. The rectum is exposed and the male half of the Murphy button is introduced into the sigmoid end, and the female half introduced on a staff through the anus and to the proper position in the rectum, an anastomosis thus being made around the strictured portion. If the stricture is less than two inches from the rectum, it is necessary to remove the coccyx in order to reach the seat of trouble. In applying the button, the portion in the sigmoid is sutured, but in the rectal half, a small opening is made in the bowel-wall, and the cylinder crowded through and the button clamped.

DR. VERRITY, of Chicago, read a contribution on "Compound Fractures of the Skull," illustrated by drawings. It was recommended to trephine compound fissured fractures, even without depression or without symptoms, for the purpose of providing drainage in case of infection, and of examining the inner table.

DR. EDWARD A. TRACEY, of Boston, Mass., described "A New Material for Surgical Splints and Jackets, and a Method of Applying It." The material employed is wood-pulp. It is prepared in sheets, and from these suitable patterns are cut. These are made pliable by

being moistened, and are then applied, being secured by a roller-bandage. After a few minutes the splint is removed and allowed to dry. As a hardening material potassium silicate suits best. A solution of dextrin also answers well.

SECTION ON PRACTICE OF MEDICINE.

THIRD DAY—JUNE 8TH.

DR. H. D. DIDAMA, of Syracuse, N. Y., reported some "Brief Clinical Memoranda." *a.* He stated that saliva is an excellent substitute for olive oil, glycerin, cosmolin, or other substance, as a lubricant for catheters. Although containing bacteria, saliva is not septic, and is always at hand. *b.* In preparing hemorrhoids for injection he anesthetizes by means of ether or the A. C. E. mixture, and follows by digital dilatation of the anus. He then brings down the hemorrhoids, ligates those with small pedicles, tying with a bow-knot, and then injects the material to be used. *c.* He recommends the following facile reduction of prolapsed hemorrhoids: The patient is placed on his back, with his knees drawn up. Cocaine is applied to the hemorrhoids, if tender. These are then thoroughly lubricated with vaselin, and with the tips of two or three fingers pressed up while the patient at the same time is directed to bear down. The hemorrhoids readily slip up into the bowel. The patient himself can perform this operation without the aid of a second person. *d.* For the ready relief of lumbago, Dr. Didama has for ten years or more employed large dry cups over the entire lumbar region. Four cups are applied at once and the application is repeated. In fifteen minutes the pain is entirely gone. The relief is usually not only prompt, but also lasting. The blood is drawn from the painful muscles to the surface, and relief is afforded. The cups should be three inches in diameter and six inches deep. A tonic and alkaline diuretic may be given.

DR. BILLINGS, of Chicago, said that in the use of saliva as a lubricant the patient is in constant danger of infection. While always containing non-pathogenic bacteria, the saliva frequently contains pathogenic and pyogenic bacteria also.

DR. DENISON, of Denver, called attention to the danger of transmitting tuberculosis by the saliva used as a lubricant, as the saliva frequently contains tubercle-bacilli.

DR. AULDE, of Philadelphia, emphasized the rheumatic origin of lumbago, and suggested the use of potassium iodid, and the salicylates, as well as the faradic current. He said that *rhus toxicodendron* is also of value in the affection.

DR. MACLEAN, of Detroit, reported a case of supposed appendicitis that had ruptured through the lung.

DR. JOSEPH PRICE said that appendicitis is one of the most troublesome conditions met with by gynecologists and abdominal surgeons. He believes the condition purely a surgical one and advises operation in every instance. The removal of the appendix in the intervals between the attacks is followed by a mortality of almost *nil*. The application of poultices and the administration of opiates are objectionable. In almost every case the adhesions are extensive, though in some very exceptional cases there are none.

DR. WHITTAKER, of Cincinnati, said that he prefers

the word typhlitis to appendicitis, and asserted that no physician would object to operation in cases in which ulceration is present. As some cases of typhlitis never have a relapse, it would be improper to operate whenever the patient complained of pain in the region of the appendix. The continually recurring cases should pass into the hands of surgeons.

DR. J. HOFFMAN, of Philadelphia, said that of 18,000 cases with disease in the right iliac region in the German hospitals there was disease of the appendix in 91 per cent., and only 9 per cent. could be classed as typhlitis. He admitted the possibility of a case getting well without treatment, either medical or surgical, but under such circumstances the convalescence is prolonged.

DR. MCMURTRY, of Louisville, stated that many cases of appendicitis are reported in the mortality lists as peritonitis, especially those occurring in males. Peritonitis is only a symptom, and usually of appendicitis.

DR. J. B. MURFREE, of Murfreesboro, Tenn., read a paper on "Diphtheria." He said that the greatest number of cases occur between the ages of three and twelve, and but very few in infants. The disease may be transmitted by cows. The period of incubation is from two to five days. The severity of the disease is the greatest at the height of the epidemic, but the intensity of the fever bears no relation to the degree of the toxemia. The pulse is usually feeble and small. The prognosis is always unfavorable. In treatment, few remedies are of much avail and none is specific. Isolation and disinfection must be absolute. Antiseptic mouth-washes; astringent gargles; the swallowing of ice, pepsin, trypsin, etc., to destroy the membranes; tincture of ferric chlorid for the blood; mercuric or mercurous chlorid; alcoholic stimulants, especially large and frequent doses of whiskey, constitute a useful method of treatment.

DR. JENKINS, of Iowa, stated that he applies topically, with absorbent cotton, a solution of ferric sulphate.

DR. E. J. C. MINARD, of Brooklyn, N. Y., read a paper on "Early Aspiration in Acute Pleuritis." It was stated that the diagnosis of the condition is not always easy. Early aspiration was advised, with thorough asepsis.

DR. ANDERS, of Philadelphia, stated that he regards the exudate of acute pleuritis as an inflammatory one, and only operates during the stage of febrile reaction when urgent symptoms appear, and then promptly. If, after the fever and pain are controlled the effusion does not become absorbed, he does not wait longer than a week or ten days, but removes the exudate by aspiration, withdrawing small amounts at a time, in order to avoid dangerous sequelæ. This is repeated every couple of days, until the tendency to recurrence is overcome. Sudden syncope may follow the removal of a large amount of fluid.

DR. CHARLES W. PURDY, of Chicago, read a paper on "The Detection and Significance of Carbohydrates in the Urine." He confined his remarks mainly to the consideration of glycosuria, for the quantitative determination of which he proposed a new test.

The test solution consists of copper sulphate, 48 grains; pure potassic hydrate, 144 grains; strong ammonia, U. S. P., 9 ounces; glycerin, 6 drams; distilled water to 20 ounces. It was said to be stable and reliable. Some of the blue solution is placed in a vessel and the

urine is dropped in from a buret, until the blue color disappears, when the amount of sugar present may be estimated.

In the discussion of the Brand method of treating typhoid fever, DR. CHR. SIHLER, of Cleveland, insisted that the cold-water treatment of typhoid fever can, should, and will be carried out in private practice. Over five thousand baths have been given under his supervision without difficulty. The objections are: (1) That it is not pleasant to the patient; still patients are usually willing to undergo the discomfort in order to increase their chances for life. (2) Four out of five of our patients will get well without it. The bath can readily be given by a member of the family, although it is better given by a trained nurse. Dr. Sihler has a tub five and three-fourths feet long, two feet wide, and sixteen inches deep. The temperature of the first bath is 88°, cold being applied to the head and friction being employed. The second bath is given at a temperature of 84°, and successive baths at 80°, 76°, and down to 68°. The temperature should be taken every half-hour after the bath. If the patient is chilled, he should be wrapped in a blanket and have hot bottles applied to the feet. Dr. Sihler regards the chill as beneficial rather than otherwise. He uses less alcohol as his experience with the bath grows.

DR. W. G. THOMPSON, of New York City, reported that he had treated 95 patients in three years by the Brand method, with a mortality of $7\frac{1}{2}$ per cent. In 1305 cases treated by the expectant method, the mortality was from 20 to 30 per cent. In the French and German hospitals the mortality has, under the Brand method, been reduced to below 2 per cent. A patient with a temperature of 102° F. is given half an ounce of whiskey, and is put into the bath for fifteen minutes, being rubbed at the same time. He is then lifted into his bed, rubbed dry, and given a glass of milk. For a young child or weak adult a bath of ten minutes is better. Often three or four baths *per diem* will suffice, but in bad cases a bath should be given ever three hours, day and night. For a nervous patient the initial bath may have a temperature of 90°. The temperature often continues falling after the bath. The occurrence of menstruation need not contra-indicate the treatment, and in one instance a patient was five months pregnant, and yet was given forty baths. A characteristic result of the treatment is the absence of nervous symptoms. The patient should void urine before entering the tub; otherwise he will be likely to urinate during the bath.

DR. HERRICK, of Chicago, said that within the past five years he had seen nearly one thousand cases of typhoid fever in hospital and private practice. He has observed that the pulse is invariably slow, notwithstanding the high temperature, and the average is from five to fifteen beats higher per minute in women than in men. A pulse over 106 in a male will require careful watching, and one of great irregularity is of bad omen. A slow pulse in typhoid fever is as characteristic as a rapid pulse in scarlet fever. Bradycardia is common in convalescence.

In Dr. Herrick's experience sweating is usually not present until late in the disease. In one case the eruption appeared on the face and over the entire body. In

20 per cent. of the cases severe epistaxis was an early symptom. The temperature in the early days of the disease is very intractable. Pain in the abdomen is not a rare occurrence, and may suggest peritonitis. Albuminuria is common, as is Ehrlich's reaction, but the diagnostic significance of the latter is doubtful. Less mental disturbance follows intestinal antiseptics than other methods of treatment. Absolute rest in the recumbent posture is insisted upon, with liquid diet, sponging with cold, tepid, or warm water, antipyretics in small doses; opium for hemorrhage; surgery for perforation. The mortality in hospital practice was 17 or 18 per cent.

DR. ANDERS, of Philadelphia, stated that he is a thorough advocate of the Brand method. He thinks that the chilly sensation produced by the cold bath is not beneficial. Such patients should at once be removed from the tub. Very weak patients should be held in one position while in the bath, to avoid exhaustion. Internal antipyretics are to be avoided in these cases, on account of the cardiac weakness as a result of degeneration of the heart-muscle. The chief value of the cold bath resides in its stimulating effect upon the nerve-centers.

FOURTH DAY—JUNE 9TH.

DR. H. A. WEST, of Galveston, Texas, presented a communication on "The Association of Diseases and Morbid Processes." He spoke of the difficulty of ascertaining after death the exact morbid condition that was the immediate cause of death. A lowering of individual vitality as a result of famine, overwork, and intemperance is one of the main predisposing causes of various morbid conditions. A widespread disobedience of sanitary laws is the common origin of most of our epidemic diseases. In all acute infectious diseases there is a great tendency to involvement of the respiratory organs, and especially to croupous and catarrhal pneumonia. Cardiac disease is usually indicated by symptoms referable to other organs, as dyspnea, digestive disturbance, intestinal or renal derangement, etc. Derangement of the function of one organ will give rise to modification of associated functions elsewhere. If the liver be primarily involved there occurs stasis of the entire portal system, with gastric and intestinal catarrh, constipation or diarrhea, jaundice, etc. Inherited diatheses, as for example, syphilis, predispose to the development of tuberculosis. Scrofulous and gouty individuals are subject to tuberculosis and lithemia respectively. An inherited neuropathic constitution predisposes to various mental and nervous disorders. Especial attention was directed to the relationship between arterio-sclerosis and cardiac and renal disease, and cerebral hemorrhage. The general increase in arterial tension puts an extra strain upon the sclerotic arteries, and rupture, with hemorrhage, readily occurs, with a resultant hemiplegia or even with a fatal result.

DR. DENISON, of Colorado, called attention to the association of fibrosis with tuberculosis. He expressed the belief that the so-called tubercles are the vaults in which nature imprisons the tubercle-bacilli to prevent their multiplication. Under the influence of tuberculin the process that results is not one of softening, but rather one of contraction, as indicated by a shrinkage

in the size of the cervical glands revealed by actual measurement.

DR. SCOTT, of Cleveland, contended that disease is not inherited. A certain state or condition that favors the contraction or development of certain diseases may, however, be transmitted from parent to child. As long as the general system is in a good condition the individual possesses a certain degree of immunity.

DR. WEBSTER, of Chicago, pointed out that disease may be transmitted by heredity, as, for instance, syphilis.

DR. J. H. KELLOGG, of Battle Creek, Mich., presented a communication on "The New Chemistry of the Stomach as a Means of Diagnosis and a Guide to Therapeutics, Based upon the Results of One Thousand Analyses of Stomach-fluids." He described a new method of analyzing the stomach-fluids, and proposed a new classification of gastric disease of functional character. The therapeutic indications of these conditions were outlined, together with the means by which these indications are to be met.

DR. CHARLES DENISON, of Denver, presented a new syringe for the injection of tuberculin, which he claimed was thoroughly aseptic and much better than the one usually employed. On one side the syringe is marked in minims, and on the other side in milligrams. Dr. Denison is in the habit of using a 1 per cent. solution for doses under 20 milligrams and a 10 per cent. solution for doses over 20 milligrams.

SECTION ON OBSTETRICS AND DISEASES OF WOMEN.

SECOND DAY—JUNE 7TH.

DR. T. RIDGWAY BARKER, of Philadelphia, read a paper entitled "The Routine Practice of Administering Ergot After the Third Stage of Labor." The advantages of the practice were summarized as follows:

It insures the woman against possible uterine relaxation, and causes a reduction in the size of the uterus, which consequently encroaches less upon the pelvic viscera. The vessels in the uterine muscular walls are depleted, and the force of the blood-current is reduced. It secures permanent closure of the uterine sinuses, and allows the formation of firm clots at the mouths of the lacerated vessels. It reduces the area of the denuded placental site, thereby lessening the danger of the entrance of septic matter into the circulation. It materially or markedly diminishes the size of the uterine cavity, with the resultant expulsion of all débris. It shortens the duration of after-pains, and renders the occurrence of fermentative changes within the cavity impossible. It hastens and facilitates the physiologic processes incident to involution. The drug is best administered in the form of tablet triturate, as it thus rarely gives rise to nausea or vomiting. It never does any harm in suitable doses, and is always productive of good.

On the other hand, when ergot is prescribed during any of the three stages of labor, it is a dangerous remedy, and likely to do far greater injury than any fancied good.

DR. GEORGE I. MCKELWAY, of Philadelphia, read a paper entitled "Repeated Extra-uterine Pregnancy, With the Report of a Case." The position was taken that in all cases in which, upon operation, a tubal pregnancy is

found, the ovaries and tubes of both sides should invariably be removed.

DR. HENRY J. CARSTENS, of Detroit, read a paper entitled "Porro versus Cesarean Section." He reported the case of a woman, aged 23, to see whom he was called in consultation after she had been under the care of a midwife for twenty-four hours. Delivery was impossible, even with forceps, and, as the child was dead, craniotomy was performed. Even after this operation, it was quite difficult to deliver, on account of the narrowness of the pelvis. The antero-posterior diameter was found to measure less than three inches. The woman made a slow, but good recovery, and was told that if she ever became pregnant again it would be necessary to induce premature labor. She was, however, desirous of having a child, and did not think that a seven-months' child would live, although informed of the danger and need of Cesarean section if she went to full term. She again became pregnant, and notified her physician two weeks before the estimated end of pregnancy. It was decided to operate at once. The patient was prepared as for any abdominal section. The bag of waters was first ruptured, and then the usual incision was made. The uterus was rolled out *a la* Müller, an elastic ligature applied; then the uterus was quickly opened, and the child, weighing eight pounds, removed. Dr. Carstens was undecided to perform a Porro operation, but all of the physicians present were unanimously in favor of it; hence, he applied a clamp and removed the uterus, tubes and ovaries. The after-treatment was like that of any other celiotomy, and recovery was smooth. The woman nursed her child from the first, and left the hospital twenty-five days after the operation. At present she is the picture of health.

DR. GILES S. MITCHELL, of Cincinnati, reported a successful case of Cesarean section. The patient was a primipara, twenty-four years of age, rather delicate, and of a highly nervous temperament. The abdominal incision was eight inches in length, two-thirds of it being above the umbilicus. There was very little bleeding from the abdominal parietes. As soon as the uterus was exposed a loop of rubber tubing was slipped over the fundus and brought down to the neck. The uterus was then quickly opened, the incision being about six inches in length, through the fundal and middle zones. Delivery was speedily accomplished by means of the feet. The child, a male weighing seven and a half pounds, was asphyxiated, but it was soon resuscitated. The stitches were removed on the seventh day after operation, union having taken place by first intention along the entire wound. On the tenth day the patient was well from a surgical standpoint.

DR. J. N. MARTIN, of Ann Arbor, Michigan, read a paper entitled "Methods of Removing the Uterus for Uterine Fibroids, With Reports of Cases."

DR. JOSEPH PRICE, of Philadelphia, contributed a paper on "Methods and Materials in Abdominal and Pelvic Surgery." He said that in gynecology much of the early work was experimental in character. Methods were tried and abandoned, and then again revived as new and original. The current method of performing vaginal hysterectomy for diseased appendages is imperfect and dangerous in the hands of any one, no matter what his surgical experience and skill. The omental and intes-

tinal adhesions commonly found must be dealt with from above. The mere removal of the uterus is a simple matter, but the complications require painstaking surgery to save the patients and to relieve them from primary and secondary conditions, which were always serious. In cases of peritonitis, whether due to infection through veins, lymph-channels, perforating ulcers, suppurating appendicitis, or dermoids, the treatment should be prompt, radical, and thorough. The cause should be sought for. The abdomen once opened, there should be no hesitation in removing the source of trouble, whether it be appendix, dermoids, suppurating tubes, or a section of intestine. All operators should have an accurate knowledge of their materials. Only imperfect work can follow the use of large coarse silk. Accidents, hemorrhages, abscesses, fistulae, and a variety of post-operative sequelae follow its use, as they do also the use of bad qualities of catgut. Fine silk, well placed, is rarely followed by any trouble.

THIRD DAY—JUNE 8TH.

DR. HENRY O. MARCY, of Boston, read a paper entitled "Ventral Hernia Following Laparotomy; Its Causes and Means of Prevention." He said that as about 10 per cent. of all celiotomies result in ventral hernia, in order to lessen or prevent this complication it has become the rule to apply a lacing abdominal support, to be worn for months. Dr. Marcy has during the last eight years employed exclusively the buried tendon suture in the closure of all abdominal wounds, except for a few months, during which time catgut was substituted for tendon. The peritoneum is closed separately. This may be effected by suturing in a variety of ways. Dr. Marcy usually employs the double continuous tendon suture, which is easily and rapidly taken, by the use of a needle with the eye near the point, and which, by rethreading with the opposite end, permits the introduction of the suture from either side through the same puncture. The result is an even, continuous, and close apposition of the serous surfaces of the peritoneum, retained at rest without undue constriction. A fine tendon should be selected for this purpose. Dr. Marcy considers the accurate coaptation of the thick investing fascia of the first importance. This is preferably effected by a line of sutures taken in a similar manner to the one closing the peritoneum. In quite three hundred celiotomies, in which a complete closure of the wound had been effected, but two cases were recalled of ventral hernia following the operation. One of the most common causes of hernia is the routine use of drainage-tubes.

DR. HENRY T. BYFORD, of Chicago, read a paper entitled "The Essentials of Success in Vaginal Hysterectomy." It was maintained that vaginal hysterectomy is an operation attended with little danger, and that the present mortality is caused mostly by: (1) Operating upon unsuitable cases; (2) imperfection in the technique; and (3) mistakes in the after-treatment.

The danger is to be overcome by operating only upon cases in which healthy tissue can be operated on; by using the methods and maneuvers adapted to each individual case, and not adhering rigidly to any one for all cases. The ligature enables the surgeon to perform a more complete operation than forceps; but forceps

should be used when ligatures cannot be applied with accuracy. When possible, omentum should be placed between the intestines and the stumps. The ligatured stumps should be drawn together and the peritoneal edges attached either to the vaginal edges or to each other. Iodoform should be packed between the blades of the forceps, but should not be allowed to project upward between the intestines. It should be left for four days as a rule. Douching should be begun about eight hours after the packing is removed, and a return tube used at the first time. The patient should be kept on her back for forty-eight hours.

Dr. Byford reported 35 cases, with 1 death, or a mortality of 2.85 per cent.

DR. LEWIS SCHOOLER, of Des Moines, Ia., read a paper on "The Propriety of Operative Measures in Pelvic Peritonitis." He said that as soon as it is apparent that other means will be of no avail, the time for operative interference is not to be delayed. In chronic cases or cases with frequent recurrences, or cases chronic as regards time and acute with regard to symptoms, there are two periods when operation is justifiable: the first, when life is endangered during a recurrence; the second, after the subsidence of an acute exacerbation. The second is the preferable period; but, unfortunately, it cannot be always secured—first, because the acute stage might demand relief; secondly, the patient frequently refuses the tender of relief of this character when the suffering is not intense. Under this head might be included all those cases of encysted collections of pus, gonorrheal or otherwise; tubal collections of whatever character; diseased and degenerated ovaries; adhesions that give the semblance of tumors by the distortion of the pelvic organs, and the consequent impairment of their functions, as well as all mental and nervous disorders directly traceable to disease of the pelvic organs.

DR. M. B. WARD, of Topeka, Kan., read a paper entitled "Surgical Treatment of Uterine Flexions." He said that it is difficult, and often impossible, to afford permanent relief in a large majority of cases of chronic retroflexion by the methods usually recommended. In many cases it is comparatively easy to give temporary relief by placing the patient in the knee-chest position and gently raising the fundus and tamponing the posterior vault with cotton-wool saturated with boric-glycerin. When it is impossible to replace the uterus in the normal position on account of adhesions, this treatment softens the adhesions, relieves engorgement, and gives comfort. The larger number of patients, however, will give histories of long suffering, many attacks of pelvic peritonitis—some mild, some severe—which will readily indicate that serious complications must be overcome before the uterus can be brought forward to the normal position. In this class of cases Dr. Ward informs the patient that the local treatment will give comfort, and if she can exercise due patience she may be permanently relieved; there is, however, a possibility of failure. The next plan recommended is the performance of abdominal section, breaking up the adhesions, removing the appendages, if they are diseased, and bringing the uterus forward. All of this may be safely accomplished in a few minutes, and recovery is likely to be speedy and permanent.

DR. FRANKLIN H. MARTIN, of Chicago, read a paper entitled "A New Operation for Uterine Fibroids, with Report of Cases." The operation consists in the ligation through the vagina of more or less of the broad ligament, with its vessels and nerves, the extent of the ligation depending upon the result sought, from a simple ligation of the base of the ligament, including the uterine artery and branches of both sides, without opening the peritoneum, to a complete ligation of the ligament of one side, including both uterine and ovarian arteries, with partial ligation of the opposite ligament, without opening the peritoneal cavity, if possible, but doing so if necessary.

DR. HENRY P. NEWMAN, of Chicago, read a paper on "Prolapse of the Female Pelvic Organs." He formulated the following conclusions:

1. Pelvic hernias should be recognized and classified as such, and not as diseases of the uterus and adnexa; and their treatment should be based upon hernial pathology.
2. Prophylaxis, in the formative stage of puberty, as well as in pregnancy and labor, is of the utmost moment in this class of cases.
3. Operations upon the pelvic floor or vaginal walls, while indispensable in their place, cannot be relied upon alone to cure all hernias of the pelvic viscera.
4. The ideal treatment is to be found in the combination of operations for repair, and those for accessory support from above, and these may all be accomplished at the same sitting, saving the delay and annoyance of repeated operations.

DR. WILLIAM HUMISTON, of Cleveland, Ohio, read a paper on "Cocaine: Its Uses in Gynecology." He has had five years' experience in the use of cocaine in gynecologic operations, and he performs the following operations with no additional anesthetic: Dilating, curetting, trachelorrhaphy, anterior and posterior colporrhaphy, and perineorrhaphy, frequently performing two of these operations at one sitting. It is essential that a reliable preparation of cocaine be used. Two solutions are prepared—a 4 and a 10 per cent. solution; the former for hypodermatic use, the latter for intra-uterine injection preceding curetting. But small quantities are prepared at a time—a dram with sterilized water, to which is added one drop of pure carbolic acid, to prevent change or the deposition of flaky particles. The quantity of cocaine used for each sitting is from three-fourths to two grains; when but one operation is performed, from one-half to one grain is required. In colporrhaphy a 4 per cent. solution is injected in a circle around the portion of mucous membrane to be removed. The whole portion is thus anesthetized, and denudation can be performed with but little bleeding and no pain.

DR. JOSEPH HOFFMAN, of Philadelphia, read a paper on "Ectopic Pregnancy: Its Comparative Symptomatology and Treatment." He said that so far as diagnosis is concerned, the term may be almost used synonymously with symptomatology, for upon the latter the former must depend.

In the treatment, Dr. Hoffman, quoted the words of Stephen Rogers, who said: "*The peritoneal cavity must be opened; the bleeding vessels must be ligated.*" He indeed must be a madman who under such circumstances would neglect everything in his power to secure

the chances such an operation would afford of saving the life of his patient."

DR. A. H. CORDIER, of Kansas City, read a paper entitled "Extra-uterine Pregnancy." He said that in an experience of sixteen cases, seen during two years in his own practice and in that of others, the duration of pregnancy had extended over as wide a range as the location of the fetus had in variety; from six weeks to two years; from a soft gelatinous embryo to a well-formed nine-pound child; from a cob-nut sized embryo in the tube to a full-grown child in the broad ligament. He held that it was only in the tube that ectopic gestation takes place, all other varieties being only secondary, by rupture of the tube as the fetus develops. All cases of tubal pregnancy rupture at some period, unless the growth of the fetus be stopped by some means; but the methods advocated to check the development of the embryo are so uncertain in result, so unsurgical, and so dangerous to the mother, and the diagnosis is so doubtful prior to rupture, that they are to be practically excluded from the management of the case. Intra-peritoneal is to extra-peritoneal rupture in the proportion of three to one. When rupture takes place between the layers of the broad ligament, the hemorrhage is limited by the resistance offered by the surrounding structures, death rarely occurring to the patient from the first rupture. Dr. Cordier then reported an interesting case of intra-ligamentous ectopic gestation operated on, in which the child was full grown, and had been retained nearly two years.

DR. LLEWELLYN ELIOT, of Washington, D. C., read a paper entitled "The Accouchement Forcé in Certain Obstetrical Complications." He defined accouchement forcé as a labor actively begun and terminated by artificial aid, either through dilators, tampons, Barnes's bags, or the fingers. He urged the superiority of the fingers over all of the mechanical devices in use. This mode of practice is indicated in cases of uremic convulsions, either threatening or in existence, rigidity of the os, placenta previa, uterine inertia, and other conditions requiring artificial aid. Dr. Eliot detailed the history of four cases in which he had employed the method—two of uremic poisoning, with threatening convulsions; one of placenta previa, and one of rigidity of the os—all of which terminated favorably.

DR. GEORGE H. ROHÉ, of Catonsville, Md., read a paper entitled "Lactational Insanity." He said that recent careful study has shown that insanity during the lying-in-period is frequently dependent upon septic puerperal processes. In studying the causes of insanity during the period of lactation, however, not sufficient discrimination has been exercised. Even in cases in which the psychic symptoms of the attack are carefully recorded, too little attention has been paid to the bodily condition. In insanity, the psychic phenomena are generally so striking as to overshadow bodily anomalies, and thus these fail of notice. Among the most recent authorities, however, Dr. Bevan Lewis regards the exhaustion and the sequelæ of labor and defective uterine involution as important etiologic factors, especially in the earlier cases of lactational insanity. Levinstein-Schlegel also lays stress upon local diseases and displacements of the pelvic organs as causes. Dr. Rohé reported five cases of insanity beginning during the nursing period,

which had been admitted to the Maryland Hospital for the Insane in the last two years. They formed 7.4 per cent. of the total number of women admitted during this period. The cases were classed clinically as melancholia, 2; mania, 1, and confusional insanity, 2.

The treatment of lactational insanity resolves itself simply into the exercise of therapeutics. Sources of irritation should be removed; aberrant functions corrected; wasted strength restored.

DR. E. C. DUDLEY, of Chicago, read a paper on "The Abuse of Emmet's Operation for Laceration of the Cervix," in which he said that failure or harm may result: (1) Because the operator has disregarded the existence of granular endometritis; (2) because the os externum has been closed so tightly as to obstruct the free outflow of uterine secretions and menstrual fluid; (3) because the cicatricial plugs in the angles of the laceration have not been removed; (4) because diseased cervical glands have been rolled into the cervical canal, where they find expression either in the form of cervical catarrh or of retention-cysts.

FOURTH DAY—JUNE 9TH.

DR. CAREY K. FLEMING, of Denver, Col., read a paper on "The Management of Patients after Celiotomy." He said that the first symptoms requiring attention after the patient has been placed in a warm bed and has recovered from the anesthetic are nausea and vomiting. Thirst, a condition that annoys the patient as much as nausea, may be controlled somewhat by leaving the abdomen well filled with warm or hot sterilized water. This is rapidly absorbed by the peritoneum, quenching the thirst to a considerable degree. Warm water per rectum often acts in the same way. In cases in which pain cannot be otherwise controlled, from 15 or 20 drops of the deodorized tincture of opium may be given per rectum as often as is required. The use of laxatives may be commenced as early as the second day and certainly not later than the third day after the operation, and continued until peristalsis is reestablished. For this purpose calomel, in powders of one-tenth grain each, may be administered every hour until the desired effect is obtained.

The following officers were elected for the ensuing year:

Chairman: Dr. Joseph Eastman, Indianapolis, Ind.

Secretary: Dr. George I. McKelway, Philadelphia, Penna.

(To be continued.)

AMERICAN ACADEMY OF MEDICINE.

Eighteenth Annual Meeting, held at Milwaukee, Wis., June 3 and 5, 1893.

FIRST DAY—JUNE 3D.

The report of the Committee on Eligible Fellows included a catalogue of nearly all the college-bred physicians in the United States, embracing over 5000 names and addresses of such members of the medical profession as are eligible to Fellowship, compiled largely from the catalogue of the various literary colleges.

From these lists some 1600 were selected, residing chiefly in the Northwest, or graduates of Harvard, to

whom copies of the handbook of the Academy were sent for the purpose of interesting them in the Academy. To make this list complete from year to year, it will be necessary to secure the coöperation of the Faculties of Medicine in furnishing the committee with a list of their graduates who are college-bred.

The report of the Committee on the Comparative Value of Academic Degrees, quoted from the last report of President Eliot, of Harvard, to the effect that the University is gradually approaching a condition in which its various degrees will be satisfactorily coördinated; so that candidates for a superior degree will be required to have already attained some appropriate inferior degree. Mention was made of the new department of medicine in the Johns Hopkins University, where this coördination has been practically accomplished. The proportion of medical students at Harvard having literary or scientific degrees is on the decrease, while in the medical department of Columbia College the reverse condition exists. The reasons assigned for this are that the average age of the Harvard A.B. is greater than that of the Columbia A.B., and that Columbia permits her men to overlap the two courses. The reasons were not found to be satisfactory, because so many of the men possessing degrees in each medical school come from other colleges; in many instances alumni from the same college are found in the two medical schools.

The custom of having different Bachelor's degrees to represent the various college courses was discussed. It was argued that if the courses were arranged as parallel in a college, they should, first, be of equal value and, secondly, afford a liberal education. If they do this, the same degree could be given to the students of each course.

The Committee recommended that the Academy urge upon the medical schools that they endeavor, as rapidly as possible, to properly coördinate the university degrees by restoring the degree of M.D. to the proper position of an advanced university degree, given only to those who have already taken a first degree. It also recommended that the colleges be urged to so arrange their various courses leading to a first degree that they may be fairly equivalent, and be rewarded by the same degree.

DE. R. LOWRY SIBBET, of Carlisle, Pa., read a thoughtful paper entitled "A Brief Review of the Attitude of Medical Schools in Relation to Matriculate and Graduate Studies." He quoted from the last report of the Illinois State Board of Health, that there had been 294 medical colleges organized in the United States prior to 1891; that 159 became extinct and 18 are on record as fraudulent. The institutions now existing may be arranged into three groups. The first group comprises the colleges requiring a four-years' course, at the head of which stands Harvard University, which has provided an admirable four-years' graded course; but the requirements for matriculation are manifestly unequal.

Thus if one enters her school of liberal arts, graduates there and then enters upon the medical course, at least ten years will have elapsed between the time of the beginning of the preparation to enter Harvard and the reception of the doctorate. But, at the same time,

the examination for entrance is such that a course of study extending over six years will secure the degree. Hence the value of the Harvard M.D. may be expressed in the unit of years of study by any number from six to ten.

Another and larger class of institutions requires a three-years' graded course, but with an equally unsatisfactory minimum entrance-examination, so that the value of the degree of M.D. from these institutions, expressed in years of study, may vary from five to nine. The third class includes those medical schools that still adhere to the two-years' ungraded course, and here the value of the degree in the same terms is from four to eight. Hence it is that our M.D. degree, as an expression of the amount of time given to obtain it, has a very variable value.

The following inferences were drawn: 1. The inequality of the M.D. degree prevents its proper recognition in Europe. 2. The American Medical School has made a prolonged effort to educate an important class of citizens by the natural sciences alone, without adequate preliminary training, and has failed. 3. Supplemental post-graduate instruction must equally fail; the higher the superstructure the greater the necessity for a foundation. 4. Time is a most important condition in the matter of education.

DR. BAYARD HOLMES, of Chicago, said that the unit of measurement should at least be in months instead of years, some schools being six months' schools, some seven, and some nine. But a better standard would be that estimated in "educational units." This "educational unit" is ordinarily considered to be sixty recitation hours, or twice as many clinical hours, *i. e.*, 120, or 120 laboratory hours. Twelve educational units thus constitute one year's work of nine months.

DR. CONNOR, of Detroit, praised the suggestion of Dr. Holmes: "It is not, however, the number of hours we sit at table, that is the important factor, but the quantity of food taken and its nutritive value." He thought that, with proper regulations, the student should keep at his studies eleven or twelve months, and in this way four years of usual work could be condensed into a smaller number of years. Much of the teaching in our medical schools is for the teachers' benefit, the most thorough instruction being positively avoided in order to get subsequent consultation-practice from poorly-equipped practitioners. Good schools do exist, despite the method, but the tendency of the method is bad. Dr. Connor also complained of the unsanitary, often filthy, condition of many medical school-buildings, a fact hindering the best results in health and work.

DR. WING added praise of the German method, whereby little value is placed upon the diploma, but a high value upon the rigorous examination. The right of the diploma to permit the holder to practise should be abolished.

DR. JONES contended that each State should establish its own standard, and that State examinations would do away with irregular schools. However great the injury from possible political methods, the injury is less than that from the diploma-authority.

In the absence of DR. JAMES W. MOORE, of Easton, Pa., an abstract of his paper, entitled "Some Thoughts in Reference to the Necessary Preliminary Training for

the Medical Profession," was read. Reference was made to the marvellous advances in all departments of knowledge coexisting with many crude beliefs that belong rather to the Middle Ages than to the nineteenth century. The medical profession is not exempt, but contains many who accept spiritualism, telepathy, *similia similibus curantur*, increased-potency-by-diminished-bulk, etc. The recent "experiments" of Dr. Luys in the Hospital of La Charité are explicable by disease, coincidence, and fraud, particularly the latter. The evidently erroneous reports to Boards of Health and the unscientific circulars in reference to contagious diseases issued by these boards were noted. The medical profession is excused, though not justified, in its desire to try anything that it thinks may result in good to humanity, on account of the weight of tradition, ignorance of preventive medicine, and lack of knowledge of science and scientific methods.

The preliminary studies should be selected for each faculty, and the exercise should be persistent. Studies introduced for training's sake alone are valuable and desirable. Youth should not be allowed to select the exercises. Mental powers should be trained when deficient. The natural sciences are best fitted to develop sense-perception; pure mathematics, the reasoning powers; grammar and language, the memory; and psychology, all. The dead languages—Latin and Greek—have advantages that the modern languages do not possess, besides being the source of medical terms.

Reasoning, both synthetic and analytic, as employed in the natural sciences, is the life-work of the physician; and in order to be successful his discipline in early life must be severe. The means employed for the training may be forgotten, but they have not been useless if the result of cultivation has been attained.

DR. HOLMES laid stress upon the extreme importance of preliminary education. The great fraud lies in the so-called preliminary examinations, to which, to Dr. Holmes' personal knowledge, college-faculties request the candidate not to come. Chemistry and biology should precede the medical course.

The President, DR. JUSTIN E. EMERSON, of Detroit, read the Annual Address. His subject was "Standards of Measurement." He clearly traced the historic progress toward accuracy in the standards of measurement of length, weight, volume, force, etc., and described the various units in use among scientific men. From these standards the speaker proceeded to the consideration of educational standards, at present indefinite, but looking toward an ideal and practical accuracy similar to that of the standards accepted in physics. A plea was made for the man and for humanity in medicine, and for generalized academic training as a basis for the professional life. Success and money are not true standards. Possession of wealth does not mean that the possessor is worth his acquirement. "I revere the man who is rich."

DR. ELBERT WING, of Chicago, opened the discussion upon the subject: "Should there be Elective Studies in a Medical Course?" The practical problem in medical education is to take the material offered and to fit it as well as possible for its work. Formerly the preceptor was the important factor, whereas now he is only a figurehead. Then the doctor knew more than his books,

while the reverse is the case at present; but his greater knowledge does not always render the modern man the better medical counselor. The usual education of to-day makes the class of men who are to become simply ordinary general practitioners safe medical men, but will not satisfy those who seek to become scientists and consultants. On the whole, the speaker advocated the institution of elective studies. They would serve more accurately and speedily to put men, especially the poorer men, in their proper places, and work now done post-graduate will be carried out in undergraduate periods. Three groups of practitioners now show the tendency toward elective studies: 1. The ordinary general practitioner; 2. The especially excellent general practitioner; 3. The specialist. All disciplinary studies should precede medical study. Except in chemistry, teachers should be physicians in actual practice. There is a danger of exacting too much laboratory work of the undergraduate. The physician's function is to heal disease, and medical knowledge without practical therapeutic ability, is like erudition without character and morality.

DR. CONNOR emphasized the value of elective studies in bringing to exercise and use the special capacities of the student, thus allowing peculiar aptitudes to be normally developed, and the provision made for all grades of practitioners.

DR. GEORGE M. GOULD, of Philadelphia, read a paper entitled "The Duty of the Community to Medical Science." He advised medical men by every means in their power to spread abroad throughout the community the fact that there is no duty so important, no self-interest so evident as the duty and the self-interest of the endowment of institutions of preventive and didactic medicine. Let the powerful and the rich fall ill, and immediately they send for a physician, but they have never taken into consideration the necessity of their help to enable the physician to successfully combat their disease. Sinking funds are created in financial matters, but financiers should be taught the financial value of health and life, and the necessity of taking some precaution to secure proper service in cases of sickness.

The productive funds of the theologic schools of the country amount to from seventeen to eighteen millions of dollars; those of the medical schools to about one-half of one million. While acknowledging the value of theologic schools, is there not a too marked contrast here? Which class of schools, from a purely financial view, yields the best mundane and cash interest, the investment in M.D.'s or that in D.D.'s? Jenner saves the community more dollars in one year than all the endowments of all the theologic schools of all the world. It is agreed that within the past few years medical science has lengthened the average life some three or four years, which proportionally postpones and lessens the number of funerals. The saving in cab-hire to the community from these postponed funerals would alone nicely endow every medical school in the land. This is a *reductio ad absurdum* of a peculiar sort, but is it not true?

The failure to endow medical schools puts the most precious things in the world—health and life—in the hands of men uneducated either as regards general literature and science, or as regards medicine. It also lessens the proportion of college-bred men studying medicine.

When a profession fails to attract the college-bred men, something is radically wrong somewhere. It consists largely in the general lowering of professional character, due to the dumping of thousands of uneducated boys into the profession. The fault of the dumping process must lie with the commercialization of medical schools. The motive for teaching in unendowed schools is too often sordid and selfish, whence it becomes necessary to graduate as many as possible, and to make true teaching subordinate to professional fame and the acquirement of consultation-practice. If half a dozen men own a college, and absorb all its revenues and honors, it is asking too much of unconverted human nature to expect them to tremendously enlarge the paid teaching body, dividing both the emoluments and fame, by reorganizing the school to meet the entirely changed demand of the day. The endowment of hospitals is attractive to people of wealth, but, as at present managed, the abuse of hospitals and dispensaries makes dangerous increase of the popular communistic habit, and works frightful injustice to physicians as a class. So it is possible that eventually hospitals may become a public injury rather than a public benefit.

But, apart from this, what is the use of a hospital other than to attempt to correct evil results without removing the causes producing them. It neglects the greater duty of prevention. To train men in the knowledge of the nature, cause, and cure of disease requires an endowed college. The unendowed college is doomed.

Prevention is the present grand problem in medicine, and there is nothing more hopeful for the future of medicine than the attention physicians are turning to prophylaxis. There is still some danger of the non-medical scientist seizing upon this branch, and leaving to the physician the more restricted department of therapeutics. To prevent this the profession must teach and beg society to endow university medical schools, so that the proper facilities and requirements may be had.

There are two sources whence the money may come: communal or State appropriations, and private gifts. The former, while it is the duty of the State to provide such facilities, is objectionable on the ground that along with wise appropriations there will be others for every sort of quackery, as when an appropriation has been voted for sectarian schools and humbugs generally. Reliance should be placed on private gifts, and for these the rich must be educated. There is more money today devoted to astronomy than to the prevention of disease. The best results may be expected by seeking an endowment for those schools connected with universities.

In addition to the endowment of professorships, there are needed medical scholarships. Medical students alone of all have no help in this direction, and many would gladly prolong their time of study were they not driven out for bread-winning.

Let us, then, go back to our lay friends with a message, a new gospel, showing the advantages of a life free from disease, and the reduction of a needlessly high death-rate, which, from a financial standpoint, will be a good investment for the community. Let us urge the service medical men have given to the community; the results to our navies of the stamping out of scurvy; the value to England of the reduction of the death-rate in the Indian army from ninety in a thousand to thirteen in a

thousand. Show by the actuaries' tables the increase of the expectation of life, and then show the money-value of this to the State. Then it may become manifest what medicine has already done; but before and beyond all, what she still promises to do, if she have but the sympathy and help she deserves.

DR. CHARLES MCINTIRE, of Easton, Pa., read a paper entitled "Medical Education in the United States; from Chaos toward Cosmos." The paper was a study of the process of preparation, and treated of the various stages in turn.

1. The preliminary requirements. Ten or fifteen years ago the single preliminary requirement was the payment of the matriculation fee, but now some educational requirement is to be found in the catalogue of almost every medical school. With but few exceptions, however, the standard of preliminary education necessary to enter upon the study of medicine is lower than the standard for entering the freshman class of any college.

2. The technical studies. After describing the character of the courses in most colleges, the essayist said: "Possibly the greatest fault in our medical educational system is the elementary character of the didactic teaching, not permitting the pupil to fully grasp the applications of that teaching in the cases presented in the clinical lectures; and the insufficiency of the reviews, or 'quizzes,' and clinical practice, which is but a review in another form."

3. The final tests. These are chiefly examinations conducted by the lecturers, each for his own subject, and of which he is the sole judge. When the diploma gives the right to practise this may, and often does, work a great deal of harm.

4. The licensure to practise. A gradually increasing number of States are adopting laws compelling the medical graduate to pass a State examination before being permitted to practise; this procedure was commended.

The American system of medical education was characterized as giving abundant opportunity to study, but making few requirements of the student. One who desires can be thoroughly trained, but the indifferent and the incompetent are given the degree without the training. It was thought that there is an improvement all along the line, and that the day is coming when the reproach would be removed from the American system of medical education.

(To be concluded.)

NEWS ITEMS.

The American Association of Genito-Urinary Surgeons will hold its Seventh Annual Meeting at Harrowgate, Tenn., June 20 and 21, 1893. The following scientific program has been arranged:

June 20th: "Report of a Case of Papilloma of the Bladder: with specimens and drawings," by John P. Bryson, M.D., of St. Louis; "Investigations as to the Presence of Lymphatic Nodules in the Normal Bladder and Other Parts of the Urinary Tract, and the Part they Play in Certain Inflammations; with specimens and microscopic preparations," by Samuel Alexander, M.D., of New York; "Two Cases of Spontaneous Fracture of Stone in

the Bladder," by Francis S. Watson, M.D., of Boston; "Long-continued and Permanent Bladder Drainage," by Paul Thorndike, M.D., of Boston; "Cases illustrating some of the more Unusual Forms of Urinary Retention," by Francis S. Watson, M.D., of Boston; "On the Treatment of Cancer of the Prostate by Supra-pubic Section, with Parenchymatous Injections of Pyoktanin Blue," by John P. Bryson, M.D., of St. Louis; "Supra-pubic Drainage of the Bladder in the Treatment of Extensive Urethro-rectal Fistula," by Samuel Alexander, M.D., of New York; "Abscess of the Space of Retzius," by Paul Thorndike, M.D., of Boston; "Exhibition of a Genital Dressing Retainer," by Bransford Lewis, M.D., of St. Louis.

June 21st: "A Case of Calculous Pyelitis with Complete Suppression of Urine for Seven Days; Relieved by Operation," by Arthur T. Cabot, M.D., of Boston; "A Case of Double Nephro-lithotomy," by James Bell, M.D., of Montreal; "Union by First Intention of the Wounds following the Excision of Inguinal Bubo," by Francis S. Watson, M.D., of Boston; "A Contribution to the Pathology of the so-called Strumous Buboes," by John A. Fordyce, M.D., of New York; "An Odd Method of Syphilitic Inoculation," by William Judkins, M.D., of Cincinnati; "Affections of the Testicle in Hereditary Syphilis," by R. W. Taylor, M.D., of New York; "Some Points in the Diagnosis of Urethral Inflammations," by Samuel Alexander, M.D., of New York; "The Role of the Posterior Urethra in Chronic Urethritis," by Bransford Lewis, M.D., of St. Louis; "An Experimental Study of the Therapeutics of Gonorrhea," by Edward Martin, M.D., of Philadelphia; "The Practical Value of Aëro-Urethroscopy (with exhibition of a new instrument)," by W. K. Otis, M.D., of New York; "Exhibition of Photo-micrographs, illustrating Some Pathological Conditions of the Urinary Organs," by John A. Fordyce, M.D., of New York.

The Medical Society of New Jersey will hold its one hundred and twenty-seventh annual meeting at Asbury Park, on June 27 and 28, 1893. The Annual Address will be delivered by the President, Dr. George T. Welch—"Therapeutical Superstition." The scientific program will include, besides, a paper by W. B. Johnson, M.D.,—"Legislation for the Prevention of Blindness." Discussion upon subject presented at last annual meeting—"Is the Philosophical Practice of Medicine not Materially Jeopardized by the Modern Methods of Venders of Drugs?" The discussion to be opened by H. L. Coit, M.D. Paper—J. Percy Wade, M.D., corresponding delegate from Maryland—"Investigation as to the Use of Sulf. Magnes. Hypodermically Administered." Essay—Third Vice-President, William Elmer, Jr., M.D.—"Quarantine of Cholera." Paper—S. E. Armstrong, M.D.—"Some Thoughts on Symptoms and Diagnosis."

Revue de la Tuberculose is the name of a new quarterly, issued from Paris, the first number of which bears the date April 15th. Petit is the editor-in-chief. The collaborators include Verneuil, Brouardel, Charcot, Cornil, Fournier, Grancher, Lannelongue, Potain, Richet, Straus, Tarnier, Kelsch, and Gamaleia. The name of the publication sufficiently indicates the scope of its activity.